#### BUREAU OF AIR POLLUTION CONTROL

## Facility ID No. A0001

### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions**

A. Emission Units PF1.001 - PF1.008 Location North 4,456.77 km, East 524.15 km, UTM (Zone 11, NAD 83)

Syst	System 1 – Pipeline Primary Metallic Ore Crushing System		
PF	1.001	Truck Dump of Metallic Ore to Jaw Crusher Dump Pocket	
PF	1.002	Jaw Crusher Dump Pocket transfer of Metallic Ore to Jaw Crusher Apron Feeder	
PF	1.003	Jaw Crusher Apron Feeder transfer of Metallic Ore to Vibrating Grizzly Screen via Chute	
PF	1.004	Vibrating Grizzly Screen (mfd. by Fister Machining Company, mdl# VEG 8420, s/n 64372)	
PF	1.005	Vibrating Grizzly Screen transfer of Metallic Ore to Jaw Crusher (oversize)	
PF	1.006	Vibrating Grizzly Screen transfer of Metallic Ore to Conveyor #1 (undersize)	
PF	1.007	Jaw Crusher (mfd by Nordberg, mdl# R196-0027)	
PF	1.008	Jaw Crusher transfer of Metallic Ore to 48"x580' Conveyor #1	

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from **PF1.001 - PF1.008** are controlled by the ore material containing at least **4% moisture**. The metallic ore material must be sampled twice per shift during operations, sampled upstream from the **Jaw Crusher** (**PF1.007**), and analyzed for moisture content.

- 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
  - a. On and after the date of startup of **PF1.001 PF1.008**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.001 PF1.008**, the following pollutants in excess of the following specified limits:
    - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **11.25** pounds per hour combined, nor more than **22.50** tons per year combined, based on a 12-month rolling period. This limit is less than the **80.51** pounds per hour maximum allowable emission limit for **System 1** as determined from NAC 445B.22033 and the maximum allowable throughput as limited in A.3.a. of this section.
    - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **25.00** pounds per hour combined, nor more than **50.00** tons per year combined, based on a 12-month rolling period.
    - (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from **PF1.001 PF1.008** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.
  - b. New Source Performance Standards (NSPS) Subpart LL Standards of Performance for Metallic Mineral Processing Plants (40 CFR Part 60.380)

On and after the sixtieth day after achieving the maximum production rate at which **System 1** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Process fugitive emissions from **PF1.001 PF1.008** each, will not exceed **10%** opacity (40 CFR Part 60.382(b)).
- (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- (3) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.001 PF1.008** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).

### **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

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## **Section VI. Specific Operating Conditions** (continued)

#### A. Emission Units PF1.001 - PF1.008 (continued)

3. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

Operating Parameters

- a. The maximum allowable throughput rate for **PF1.001 PF1.008** each, will not exceed **1,250.0** tons of **as fed ore** per any one-hour period.
- b. The maximum annual throughput rate for **PF1.001 PF1.008** each, will not exceed **5,000,000.0** tons of **as fed ore** per year, based on a 12-month rolling period.
- c. Hours

PF1.001 - PF1.008 each, may operate 8,760 hours per calendar year.

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of as fed ore for **PF1.001 PF1.008** each, on a daily basis.
- (2) Monitor and record the hours of operation for **PF1.001 PF1.008** each, on a daily basis.
- (3) Monitor and record the throughput rate of as fed ore for **PF1.001 PF1.008** each, on a cumulative monthly basis, for each 12-month rolling period.
- (4) Monitor the metallic ore moisture content upstream from the **Jaw Crusher (PF1.007)**, on a twice per shift basis.
- (5) Conduct and record a visible emissions test on **PF1.001 PF1.008** each, in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **PF1.001 PF1.008** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (6) The required monitoring established in (1) through (5) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.001 PF1.008** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of as fed ore, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of as fed ore, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of as fed ore, for each 12-month rolling period.
  - (f) Results and verification of the metallic ore moisture content on a twice per shift basis.
  - (g) The results of each visible emissions tests and any corrective action taken.
- b. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b))
  The permittee, upon issuance date of this permit, shall:
  - (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>
  <u>Shielded Requirements</u>

#### BUREAU OF AIR POLLUTION CONTROL

## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

B. Emission Units PF1.009 - PF1.010 Location North 4,456.74 km, East 524.08 km, UTM (Zone 11, NAD 83)

Syst	System 2 – Pipeline Metallic Ore Transfers		
PF	1.009	48"x580' Conveyor #1 transfer of Metallic Ore to 48"x375' Conveyor #2	
PF	1.010	48"x375' Conveyor #2 (Stacker Conveyor) transfer of Metallic Ore to Metallic Ore Stockpile	

1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 

Air Pollution Control Equipment

Emissions from PF1.009 - PF1.010 are controlled by the ore material containing at least 4% moisture. The metallic ore material must be sampled twice per shift during operations, sampled upstream from the Jaw Crusher (PF1.007, System 1), and analyzed for moisture content.

- 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
  - a. On and after the date of startup of **PF1.009 PF1.010**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.009 PF1.010**, the following pollutants in excess of the following specified limits:
    - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.82** pounds per hour each, nor more than **1.64** tons per year each, based on a 12-month rolling period. This limit is less than the **80.51** pounds per hour for each maximum allowable emission limit as determined from NAC 445B.22033 and each maximum allowable throughput as limited in B.3.a. of this section.
    - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **1.74** pounds per hour each, nor more than **3.47** tons per year each, based on a 12-month rolling period.
    - (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from **PF1.009 PF1.010** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.
  - b. New Source Performance Standards (NSPS) Subpart LL Standards of Performance for Metallic Mineral Processing Plants (40 CFR Part 60.380)

On and after the sixtieth day after achieving the maximum production rate at which **System 2** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Process fugitive emissions from **PF1.009** will not exceed **10%** opacity (40 CFR Part 60.382(b)).
- (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- (3) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.009**, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).

### **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

- B. Emission Units PF1.009 PF1.010 (continued)
  - 3. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Operating Parameters
    - a. The maximum allowable throughput rate for **PF1.009 PF1.010** each, will not exceed **1,250.0** tons of **as fed ore** per any one-hour period.
    - b. The maximum annual throughput rate for **PF1.009 PF1.010** each, will not exceed **5,000,000.0** tons of **as fed ore** per year, based on a 12-month rolling period.
    - c. Hours

PF1.009 - PF1.010 each, may operate 8,760 hours per calendar year.

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of as fed ore for **PF1.009 PF1.010** each, on a daily basis.
- (2) Monitor and record the hours of operation for **PF1.009 PF1.010** each, on a daily basis.
- (3) Monitor and record the throughput rate of as fed ore for **PF1.009 PF1.010** each, on a cumulative monthly basis, for each 12-month rolling period.
- (4) Monitor the metallic ore moisture content upstream from the **Jaw Crusher (PF1.007, System 1)**, on a twice per shift basis.
- (5) Conduct and record a visible emissions test on **PF1.009 PF1.010** each, in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **PF1.009 PF1.010** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (6) The required monitoring established in (1) through (5) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.009 PF1.010** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of as fed ore, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of as fed ore, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of as fed ore, for each 12-month rolling period.
  - (f) Results and verification of the metallic ore moisture content on a twice per shift basis.
  - (g) The results of each visible emissions tests and any corrective action taken.
- b. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b))

The permittee, upon issuance date of this permit, shall:

- (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Shielded Requirements

### **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

C. Emission Units PF1.011 – PF1.013 Location North 4.456.73 km, East 523.93 km, UTM (Zone 11, NAD 83)

Sys	System 3 – Pipeline Metallic Ore Transfers			
PF	1.011	Apron Feeder #1 transfer of Metallic Ore to 42"x650' Conveyor #3		
PF	1.012	Apron Feeder #2 transfer of Metallic Ore to 42"x650' Conveyor #3		
PF	1.013	Emergency Apron Feeder transfer of Metallic Ore to 42"x650' Conveyor #3		

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Transfer points for emission units PF1.011 – PF1.013 are located underneath the Metallic Ore Stockpile (System 2). Emissions from PF1.011 - PF1.013 are controlled by the ore material containing at least 4% moisture. The metallic ore material must be sampled twice per shift during operations, sampled at the Apron Feeder(s) transfer point to Conveyor #3, and analyzed for moisture content.

- 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
  - a. On and after the date of startup of **PF1.011 PF1.013**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.011 PF1.013**, the following pollutants in excess of the following specified limits:
    - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.33** pounds per hour combined, nor more than **0.67** tons per year combined, based on a 12-month rolling period. This limit is less than the **80.51** pounds per hour combined maximum allowable emission limit as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited in C.3.a. of this section.
    - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.71** pounds per hour combined, nor more than **1.41** tons per year combined, based on a 12-month rolling period.
    - (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from **PF1.011 PF1.013** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.
  - b. New Source Performance Standards (NSPS) Subpart LL Standards of Performance for Metallic Mineral Processing Plants (40 CFR Part 60.380)

On and after the sixtieth day after achieving the maximum production rate at which **System 3** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Process fugitive emissions from **PF1.011 PF1.013** each, will not exceed **10%** opacity (40 CFR Part 60.382(b)).
- (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- (3) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.011 PF1.013** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).

#### **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

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## **Section VI. Specific Operating Conditions (continued)**

- Emission Units PF1.011 PF1.013 (continued)
  - NAC 445B.3405 (NAC 445B.316) Part 70 Program 3. **Operating Parameters** 
    - The maximum allowable throughput rate for PF1.011 PF1.013 combined, will not exceed 1,250.0 tons of as fed ore per any one-hour period.
    - The maximum annual throughput rate for PF1.011 PF1.013 combined, will not exceed 5,000,000.0 tons of as fed ore per year, based on a 12-month rolling period.
    - Hours

**PF1.011 - PF1.013** each, may operate **8,760** hours per calendar year.

- NAC 445B.3405 (NAC 445B.316) Part 70 Program 4.
  - Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of as fed ore for **PF1.011 PF1.013** each, on a daily basis.
- (2) Monitor and record the hours of operation for **PF1.011 PF1.013** each, on a daily basis.
- (3) Monitor and record the throughput rate of as fed ore for **PF1.011 PF1.013** each, on a cumulative monthly basis, for each 12-month rolling period.
- (4) Monitor the metallic ore moisture content at the Apron Feeder(s) transfer point to Conveyor #3, on a twice per shift basis.
- (5) Conduct and record a visible emissions test at the point where **Conveyor #3 exits the underground**, in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that PF1.011 - PF1.013 is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (6) The required monitoring established in (1) through (5) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.011 - PF1.013** each, are operating:
  - The calendar date of any required monitoring. (a)
  - The total daily throughput rate of as fed ore, in tons, for the corresponding date.
  - The total daily hours of operation for the corresponding date.
  - The corresponding average hourly throughput rate of as fed ore, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - The cumulative monthly throughput rate of as fed ore, for each 12-month rolling period. (e)
  - (f) Results and verification of the metallic ore moisture content on a twice per shift basis.
  - The results of each visible emissions tests and any corrective action taken.
- New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b))

The permittee, upon issuance date of this permit, shall:

- (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) Part 70 Program

**Shielded Requirements** 

### BUREAU OF AIR POLLUTION CONTROL

## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

**D. Emission Unit PF1.014** Location North 4,456.86 km, East 523.95 km, UTM (Zone 11, NAD 83)

System 4 – Pipeline Metallic Ore Transfer

PF | 1.014 | 42"x650' Conveyor #3 transfer of Metallic Ore to SAG Mill

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from **PF1.014** are controlled by the ore material containing at least **4% moisture and a full (building) enclosure**. The metallic ore material must be sampled twice per shift during operations, sampled at the **Apron Feeder(s) transfer point to Conveyor #3 (System 3)**, and analyzed for moisture content.

2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

- Emission Limits
- a. On and after the date of startup of **PF1.014**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.014**, the following pollutants in excess of the following specified limits:
  - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.00** pounds per hour, nor more than **0.00** tons per year, based on a 12-month rolling period. This limit is less than the **80.51** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited in D.3.a. of this section.
  - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.00** pounds per hour, nor more than **0.00** tons per year, based on a 12-month rolling period.
  - (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from **PF1.014** will not equal or exceed **20%** in accordance with NAC 445B.22017.
- b. New Source Performance Standards (NSPS) Subpart LL Standards of Performance for Metallic Mineral Processing Plants (40 CFR Part 60.380)

On and after the sixtieth day after achieving the maximum production rate at which **System 4** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Process fugitive emissions from **PF1.014** will not exceed **10%** opacity (40 CFR Part 60.382(b)).
- (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- (3) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.014** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. The maximum allowable throughput rate for **PF1.014** will not exceed **1,550.0** tons of **as fed ore** per any one-hour period.
- b. The maximum annual throughput rate for **PF1.014** will not exceed **5,000,000.0** tons of **as fed ore** per year, based on a 12-month rolling period.
- c Hours

PF1.014 may operate 8,760 hours per calendar year.

### BUREAU OF AIR POLLUTION CONTROL

## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

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## **Section VI. Specific Operating Conditions** (continued)

- **Emission Unit PF1.014 (continued)** 
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of as fed ore for **PF1.014** on a daily basis.
- (2) Monitor and record the hours of operation for **PF1.014** on a daily basis.
- (3) Monitor and record the throughput rate of as fed ore for **PF1.014** on a cumulative monthly basis, for each 12-month rolling period.
- (4) Monitor the metallic ore moisture content at the Apron Feeder(s) transfer point to Conveyor #3 (System 3), on a twice per shift basis.
- (5) Conduct a daily observation on the enclosure system; record the time of the observation and indicate if enclosure system is operating normally.
- (6) Conduct and record a visible emissions test on PF1.014 in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **PF1.014** is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (7) The required monitoring established in (1) through (6) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.014** are operating:
  - The calendar date of any required monitoring.
  - The total daily throughput rate of as fed ore, in tons, for the corresponding date.
  - The total daily hours of operation for the corresponding date. (c)
  - The corresponding average hourly throughput rate of as fed ore, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - The cumulative monthly throughput rate of as fed ore, for each 12-month rolling period. (e)
  - Results and verification of the metallic ore moisture content on a twice per shift basis.
  - Results and verification of the daily observations on the enclosure system, and any corrective actions taken in order to maintain implementation and proper use of the enclosure system used for control of emissions.
  - The results of each visible emissions tests and any corrective action taken.
- New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b)) The permittee, upon issuance date of this permit, shall:
  - (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- NAC 445B.3405 (NAC 445B.316) Part 70 Program 5. Shielded Requirements

#### BUREAU OF AIR POLLUTION CONTROL

## Facility ID No. A0001

### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

E. Emission Units PF1.015 - PF1.019 Location North 4.456.72 km, East 523.94 km, UTM (Zone 11, NAD 83)

Sys	System 5 – Pipeline Wet Mill Crushing & Screening System		
PF	1.015	SAG Mill and Metallic Ore transfer to SAG Mill Screens	
PF	1.016	SAG Mill Screens and Metallic Ore transfer to Grinding Cyclones (undersize) and Conveyor #4	
		(oversize)	
PF	1.017	Grinding Cyclones and Metallic Ore transfer to Ball Mill (oversize) and Trash Screens (undersize)	
PF	1.018	Ball Mill and Metallic Ore transfer to Grinding Cyclones	
PF	1.019	Trash Screens and Metallic Ore transfer to Surge Tank	

1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 

Air Pollution Control Equipment

System 5 is a wet process. Emissions from PF1.015 - PF1.019 are controlled by the wet mill being enclosed in a building and the ore material being completely saturated by water.

- 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
  - a. On and after the date of startup of **PF1.015 PF1.019**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.015 PF1.019**, the following pollutants in excess of the following specified limits:
    - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.00** pounds per hour combined, nor more than **0.00** tons per year combined, based on a 12-month rolling period. This limit is less than the **80.51** pounds per hour maximum allowable emission limit for **System 5** as determined from NAC 445B.22033 and the maximum allowable throughput as limited in E.3.a. of this section.
    - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.00** pounds per hour combined, nor more than **0.00** tons per year combined, based on a 12-month rolling period.
    - (3) NAC 445B.305 (*Federally Enforceable SIP Requirement*) The opacity from **PF1.015 PF1.019** each, will not exceed **0%** in accordance with NAC 445B.305.
  - b. New Source Performance Standards (NSPS) Subpart LL Standards of Performance for Metallic Mineral Processing Plants (40 CFR Part 60.380)

On and after the sixtieth day after achieving the maximum production rate at which **System 5** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Process fugitive emissions from **PF1.015 PF1.019** each, will not exceed **10%** opacity (40 CFR Part 60.382(b)).
- (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- (3) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.015 PF1.019** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).

### BUREAU OF AIR POLLUTION CONTROL

## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

- E. Emission Units PF1.015 PF1.019 (continued)
  - 3. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Operating Parameters
    - a. The maximum allowable throughput rate for **PF1.015 PF1.019** each, will not exceed **1,550.0** tons of **as fed saturated ore** per any one-hour period.
    - b. The maximum annual throughput rate for **PF1.015 PF1.019** each, will not exceed **5,000,000.0** tons of **as fed saturated ore** per year, based on a 12-month rolling period.
    - c. Hours

PF1.015 - PF1.019 each, may operate 8,760 hours per calendar year.

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of as fed saturated ore for **PF1.015 PF1.019** each, on a daily basis.
- (2) Monitor and record the hours of operation for **PF1.015 PF1.019** each, on a daily basis.
- (3) Monitor and record the throughput rate of as fed saturated ore for **PF1.015 PF1.019** each, on a cumulative monthly basis, for each 12-month rolling period.
- (4) The required monitoring established in (1) through (4) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.015 PF1.019** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of as fed saturated ore, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of as fed saturated ore, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of as fed saturated ore, for each 12-month rolling period.
- b. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b))
  The permittee, upon issuance date of this permit, shall:
  - (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Shielded Requirements

#### **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

F. Emission Units PF1.020 – PF1.024 Location North 4.456.85 km, East 523.93 km, UTM (Zone 11, NAD 83)

Syst	System 6 – Pipeline Secondary Metallic Ore Crushing System		
PF	1.020	Conveyor #4 transfer of Metallic Ore to Conveyor #5	
PF	1.021	Conveyor #5 transfer of Metallic Ore to Cone Crusher	
PF	1.022	Cone Crusher (mfd by Nordberg, mdl# 1560)	
PF	1.023	Cone Crusher transfer of Metallic Ore to Conveyor #6	
PF	1.024	Conveyor #6 transfer of Metallic Ore to Conveyor #3 (SAG Mill Feed Conveyor)	

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from **PF1.020 - PF1.024** are controlled by an **enclosure**.

2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits

- a. On and after the date of startup of **PF1.020 PF1.024**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.020 PF1.024**, the following pollutants in excess of the following specified limits:
  - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.56** pounds per hour combined, nor more than **1.13** tons per year combined, based on a 12-month rolling period. This limit is less than the **63.00** pounds per hour maximum allowable emission limit for **System 6** as determined from NAC 445B.22033 and the maximum allowable throughput as limited in F.3.a. of this section.
  - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **1.24** pounds per hour combined, nor more than **2.48** tons per year combined, based on a 12-month rolling period.
  - (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from **PF1.020 PF1.024** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.
- b. New Source Performance Standards (NSPS) Subpart LL Standards of Performance for Metallic Mineral Processing Plants (40 CFR Part 60.380)

On and after the sixtieth day after achieving the maximum production rate at which **System 6** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Process fugitive emissions from **PF1.020 PF1.024** each, will not exceed **10%** opacity (40 CFR Part 60.382(b)).
- (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- (3) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.020 PF1.024** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).

### **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

- F. Emission Units PF1.020 PF1.024 (continued)
  - 3. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Operating Parameters
    - a. The maximum allowable throughput rate for **PF1.020 PF1.024** each, will not exceed **300.0** tons of **as fed ore** per any one-hour period.
    - b. The maximum annual throughput rate for **PF1.020 PF1.024** each, will not exceed **1,200,000.0** tons of **as fed ore** per year, based on a 12-month rolling period.
    - c. Hours

PF1.020 - PF1.024 each, may operate 8,760 hours per calendar year.

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of as fed ore for PF1.020 PF1.024 each, on a daily basis.
- (2) Monitor and record the hours of operation for **PF1.020 PF1.024** each, on a daily basis.
- (3) Monitor and record the throughput rate of as fed ore for **PF1.020 PF1.024** each, on a cumulative monthly basis, for each 12-month rolling period.
- (4) Conduct a daily observation on the enclosure system; record the time of the observation and indicate if enclosure system is operating normally.
- (5) Conduct and record a visible emissions test on the **enclosures of PF1.020 PF1.024** in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **PF1.020 PF1.024** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (6) The required monitoring established in (1) through (5) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.020 PF1.024** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of as fed ore, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of as fed ore, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of as fed ore, for each 12-month rolling period.
  - (f) Results and verification of the daily observations on the enclosure system, and any corrective actions taken in order to maintain implementation and proper use of the enclosure system used for control of emissions.
  - (g) The results of each visible emissions tests and any corrective action taken.
- b. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b)) The permittee, upon issuance date of this permit, shall:
  - (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

**Shielded Requirements** 

#### **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

G. Emission Units PF1.020A & PF1.025 Location North 4,456.85 km, East 523.93 km, UTM (Zone 11, NAD 83)

Sys	System 6A – Pipeline Secondary Metallic Ore Crushing System, Alternate Operating Scenario to System 6		
PF	1.020A	Conveyor #4 transfer of Metallic Ore to Conveyor #5	
PF	1.025	Conveyor #5 transfer of Metallic Ore to Scats Stockpile	

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from PF1.020A and PF1.025 are controlled by an enclosure.

2. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Emission Limits**

- a. On and after the date of startup of **PF1.020A and PF1.025**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.020A and PF1.025**, the following pollutants in excess of the following specified limits:
  - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.10** pounds per hour each, nor more than **0.20** tons per year each, based on a 12-month rolling period. This limit is less than the **63.00** pounds per hour for each maximum allowable emission limit as determined from NAC 445B.22033 and each maximum allowable throughput as limited in G.3.a. of this section.
  - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.22** pounds per hour each, nor more than **0.43** tons per year each, based on a 12-month rolling period.
  - (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from **PF1.020A and PF1.025** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.
- b. New Source Performance Standards (NSPS) Subpart LL Standards of Performance for Metallic Mineral Processing Plants (40 CFR Part 60.380)

On and after the sixtieth day after achieving the maximum production rate at which **System 6A** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Process fugitive emissions from **PF1.020A** will not exceed **10%** opacity (40 CFR Part 60.382(b)).
- (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- (3) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.020A** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. The maximum allowable throughput rate for PF1.020A and PF1.025 each, will not exceed 300.0 tons of as fed ore per any one-hour period.
- b. The maximum annual throughput rate for **PF1.020A** and **PF1.025** each, will not exceed **1,200,000.0** tons of **as fed ore** per year, based on a 12-month rolling period.
- c. Hours

PF1.020A and PF1.025 each, may operate 8,760 hours per calendar year.



## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

### **Section VI. Specific Operating Conditions (continued)**

- G. Emission Units PF1.020A & PF1.025 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - a. <u>Monitoring, Record keeping and Compliance</u>
      - The Permittee, upon issuance of this operating permit will:
      - (1) Monitor and record the throughput rate of as fed ore for PF1.020A and PF1.025 each, on a daily basis.
      - (2) Monitor and record the hours of operation for **PF1.020A** and **PF1.025** each, on a daily basis.
      - (3) Monitor and record the throughput rate of as fed ore for **PF1.020A** and **PF1.025** each, on a cumulative monthly basis, for each 12-month rolling period.
      - (4) Conduct a daily observation on the enclosure system; record the time of the observation and indicate if enclosure system is operating normally.
      - (5) Conduct and record a visible emissions test on the **enclosures of PF1.020A and PF1.025** in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **PF1.020A and PF1.025** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
      - (6) The required monitoring established in (1) through (5) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.020A and PF1.025** each, are operating:
        - (a) The calendar date of any required monitoring.
        - (b) The total daily throughput rate of as fed ore, in tons, for the corresponding date.
        - (c) The total daily hours of operation for the corresponding date.
        - (d) The corresponding average hourly throughput rate of as fed ore, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
        - (e) The cumulative monthly throughput rate of as fed ore, for each 12-month rolling period.
        - (f) Results and verification of the daily observations on the enclosure system, and any corrective actions taken in order to maintain implementation and proper use of the enclosure system used for control of emissions.
        - (g) The results of each visible emissions tests and any corrective action taken.
    - b. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b))
      The permittee, upon issuance date of this permit, shall:
      - (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
  - 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>



## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

H. Emission Units PF1.020B, PF1.026, PF1.024B Location North 4,456.85 km, East 523.93 km, UTM (Zone 11, NAD 83)

Syst	System 6B – Pipeline Secondary Metallic Ore Crushing System, Alternate Operating Scenario to System 6		
PF	1.020B	Conveyor #4 transfer of Metallic Ore to Conveyor #5	
PF	1.026	Conveyor #5 transfer of Metallic Ore to Conveyor #6	
PF	1.024B	Conveyor #6 transfer of Metallic Ore to Conveyor #3 (SAG Mill Feed Conveyor)	

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from PF1.020B, PF1.026, and PF1.024B are controlled by an enclosure.

2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

#### **Emission Limits**

- a. On and after the date of startup of PF1.020B, PF1.026, and PF1.024B, the permittee will not discharge or cause the discharge into the atmosphere from PF1.020B, PF1.026, and PF1.024B, the following pollutants in excess of the following specified limits:
  - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.10** pounds per hour each, nor more than **0.20** tons per year each, based on a 12-month rolling period. This limit is less than the **63.00** pounds per hour for each maximum allowable emission limit as determined from NAC 445B.22033 and each maximum allowable throughput as limited in H.3.a. of this section.
  - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.22** pounds per hour each, nor more than **0.43** tons per year each, based on a 12-month rolling period.
  - (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from **PF1.020B**, **PF1.026**, and **PF1.024B** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.
- b. New Source Performance Standards (NSPS) Subpart LL Standards of Performance for Metallic Mineral Processing Plants (40 CFR Part 60.380)

On and after the sixtieth day after achieving the maximum production rate at which **System 6B** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Process fugitive emissions from **PF1.020B**, **PF1.026**, and **PF1.024B** each, will not exceed **10%** opacity (40 CFR Part 60.382(b)).
- (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- (3) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.020B**, **PF1.026**, and **PF1.024B** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).

### **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

- H. Emission Units PF1.020B, PF1.026, and PF1.024B (continued)
  - 3. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Operating Parameters
    - a. The maximum allowable throughput rate for **PF1.020B**, **PF1.026**, and **PF1.024B** each, will not exceed **300.0** tons of as **fed ore** per any one-hour period.
    - b. The maximum annual throughput rate for **PF1.020B**, **PF1.026**, and **PF1.024B** each, will not exceed **1,200,000.0** tons of as fed ore per year, based on a 12-month rolling period.
    - c. Hours

PF1.020B, PF1.026, and PF1.024B each, may operate 8,760 hours per calendar year.

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of as fed ore for PF1.020B, PF1.026, and PF1.024B each, on a daily basis.
- (2) Monitor and record the hours of operation for PF1.020B, PF1.026, and PF1.024B each, on a daily basis.
- (3) Monitor and record the throughput rate of as fed ore for **PF1.020B**, **PF1.026**, and **PF1.024B** each, on a cumulative monthly basis, for each 12-month rolling period.
- (4) Conduct a daily observation on the enclosure system; record the time of the observation and indicate if enclosure system is operating normally.
- (5) Conduct and record a visible emissions test on the **enclosres of PF1.020B, PF1.026, and PF1.024B** in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **PF1.020B, PF1.026, and PF1.024B** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (6) The required monitoring established in (1) through (5) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.020B**, **PF1.026**, and **PF1.024B** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of as fed ore, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of as fed ore, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of as fed ore, for each 12-month rolling period.
  - (f) Results and verification of the daily observations on the enclosure system, and any corrective actions taken in order to maintain implementation and proper use of the enclosure system used for control of emissions.
  - (g) The results of each visible emissions tests and any corrective action taken.
- b. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b))
  The permittee, upon issuance date of this permit, shall:
  - (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>

### BUREAU OF AIR POLLUTION CONTROL

## Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

Emission Units S2.001 & PF1.027 Location North 4.456,75 km, East 523,94 km, UTM (Zone 11, NAD 83)

System 7 – Pipeline Wet Mill Lime Silo		
S	2.001	Wet Mill Lime Silo pneumatic loading
PF	1.027	Wet Mill Lime Silo unloading to 42"x650' Conveyor #3 via enclosed Screw Conveyor

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from **S2.001** shall be ducted to a control system consisting of a **bin vent** with 100% capture. Emissions from **PF1.027** will be controlled by an **enclosure** that completely encloses this transfer point.

2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

**Emission Limits** 

a. NAC 445B.305 Part 70 Program

On and after the date of startup of **S2.001**, Permittee will not discharge or cause the discharge into the atmosphere from the bin vent of **S2.001**, the following pollutants in excess of the following specified limits:

- (1) The discharge of  $PM_{10}$  (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.012** pounds per hour, nor more than **0.003** tons per year, based on a 12-month rolling period.
- (2) The discharge of PM (particulate matter) to the atmosphere will not exceed **0.035** pounds per hour, nor more than **0.009** tons per year, based on a 12-month rolling period.
- (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from the **bin vent discharge of S2.001** will not equal or exceed **20%** in accordance with NAC 445B.22017.

#### b. NAC 445B.305 *Part 70 Program*

On and after the date of startup of **PF1.027**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.027**, the following pollutants in excess of the following specified limits:

- (1) The discharge of PM<sub>10</sub> to the atmosphere will not exceed **0.032** pounds per hour, nor more than **0.14** tons per year, based on a 12-month rolling period. This limit is less than the **6.52** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by paragraph I.3.c of this section.
- (2) The discharge of PM to the atmosphere will not exceed **0.11** pounds per hour, nor more than **0.50** tons per year, based on a 12-month rolling period.
- (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from **PF1.027** will not equal or exceed **20%** in accordance with NAC 445B.22017.

## **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

- I. Emission Units S2.001 & PF1.027 (continued)
  - 3. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Operating Parameters
    - a. The maximum allowable loading rate for **S2.001** will not exceed **35.0** tons of **lime** per any one-hour period.
    - b. The maximum annual loading rate for **S2.001** will not exceed **17,520.0** tons of **lime** per year, based on a 12-month rolling period.
    - c. The maximum allowable discharge rate for **PF1.027** will not exceed **2.0** tons of **lime** per any one-hour period.
    - d. The maximum annual discharge rate for **PF1.027** will not exceed **17,520.0** tons of **lime** per year, based on a 12-month rolling period.
    - e. Hours
      - (1) S2.001 may operate 24 hours per day, but no more than 1,000 hours per calendar year.
      - (2) **PF1.027** may operate **8,760** hours per calendar year.
  - 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
    - a. Monitoring, Record keeping and Compliance
      - The Permittee, upon issuance of this operating permit will:
      - (1) Monitor and record the loading rate of lime for **S2.001** on a daily basis.
      - (2) Monitor and record the discharge rate of lime for **PF1.027** on a daily basis.
      - (3) Monitor and record the hours of operation of **S2.001** and **PF1.027** on a daily basis.
      - (4) Conduct a monthly inspection of the **bin vent on S2.001** in accordance with the manufacturer's operation and maintenance manual and record the results (e.g. the condition of the filter fabric) and any corrective actions taken.
      - (5) Conduct a monthly inspection of the **enclosure on PF1.027** and record the results and any corrective action taken.
      - (6) Conduct and record a visible emissions test on the **bin vent of S2.001 and enclosure of PF1.027** in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a monthly basis for any month or a portion thereof that **S2.001 and PF1.027** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
      - (7) The required monitoring established in (1) through (6) above will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.001 and PF1.027** is operating:
        - (a) The calendar date of any required monitoring.
        - (b) The total daily loading rate of lime, in tons, for the corresponding date.
        - (c) The total daily discharge rate of lime, in tons, for the corresponding date.
        - (d) The total daily loading hours of operation for the corresponding date.
        - (e) The total daily discharge hours of operation for the corresponding date.
        - (f) The corresponding average hourly loading rate of lime, in tons per hour. The average hourly loading rate will be determined from the daily loading rate and the total daily hours of operation recorded in (b) and (d) above.
        - (g) The cumulative monthly loading rate of lime, for each 12-month rolling period.
        - (h) The corresponding average hourly discharge rate of lime, in tons per hour. The average hourly discharge rate will be determined from the daily discharge rate and the total daily hours of operation recorded in (c) and (e) above.
        - (i) The cumulative monthly discharge rate of lime, for each 12-month rolling period.
        - (j) Results and verification of the monthly inspections on the **bin vent for S2.001 and enclosure for PF1.027**, and any corrective actions taken in order to maintain implementation and proper use of the **bin vent** and **enclosure system** used for control of emissions.
        - (k) The results of each visible emissions tests and any corrective action taken.
  - 5. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

**Shielded Requirements** 

### BUREAU OF AIR POLLUTION CONTROL

## Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

J. Emission Units S2.002 - S2.003 Location North 4,456.91 km, East 523.90 km, UTM (Zone 11, NAD 83)

Sys	System 8 – Pipeline Refinery Induction Furnaces		
S	2.002	Refinery Induction Furnace #1 (mfd by Inducto Therm, mdl# VIP Power Trak-R, s/n 80354)	
S	2.003	Refinery Induction Furnace #2 (mfd by Inducto Therm, mdl# VIP Power Trak-R, s/n 59585-6-96)	

1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 

Air Pollution Control Equipment

Emissions from **S2.002** – **S2.003** shall be ducted to a primary control system consisting of a baghouse with 100% capture. The emissions from the primary control are ducted to a control system consisting of a carbon filter (sulfur impregnated carbon) with 100% capture and a maximum volume flow rate of 1,700 dry standard cubic feet per minute (dscfm), followed by ducting to the outside atmosphere. The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

Stack height – 17 feet Stack inside diameter – 10 inches Nominal Stack temperature – 120 °F

#### 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits

- a. On and after the date of startup of **S2.002 S2.003**, Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of the **baghouse** the following pollutants in excess of the following specified limits:
  - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.29** pounds per hour, nor more than **0.44** tons per year, based on a 12-month rolling period. This limit is less than the **3.22** pounds per hour maximum allowable emission limit for **System 8** as determined from NAC 445B.22033 and the combined maximum allowable batch weights as limited in J.3.a and J.3.b of this section.
  - (2) NAC 445B.305 Part 70 Program The discharge of PM (particulate matter) to the atmosphere will not exceed **0.29** pounds per hour, nor more than **0.44** tons per year, based on a 12-month rolling period.
  - (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from the **baghouse for S2.002 S2.003** will not equal or exceed **20%** in accordance with NAC 445B.22017.
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. The maximum allowable batch weight for \$2.002 will not exceed 600 pounds of precious metal concentrate.
- b. The maximum allowable batch weight for **S2.003** will not exceed **400 pounds** of **precious metal concentrate** per any one-hour period.
- c. The maximum allowable throughput rate for \$2.002 \$2.003 combined, will not exceed 150.0 tons of precious metal concentrate per year, based on a 12-month rolling period.
- d. Hours
  - (1) **S2.002 S2.003** each, may operate **24** hours per day.
  - (2) S2.002 S2.003 combined, may not operate in excess of 3,000 hours per calendar year.



## Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

- J. Emission Units S2.002 S2.003 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316); NAC 445B.252 *Part 70 Program* 
    - a. <u>Monitoring, Record keeping and Compliance</u>

Permittee will:

- (1) Monitor and record the batch weight of precious metal concentrate for **S2.002 S2.003** each and combined, on a daily basis.
- (2) Monitor and record the hours of operation of **S2.002 S2.003** combined, on a daily basis.
- (3) Conduct and record a visible emissions test on the **exhaust stack of the baghouse** in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **S2.002 S2.003** is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (4) Conduct and record a weekly reading of differential pressure on the **baghouse**, and verify that it is within the range established by the manufacturer; record the time of the reading and the differential pressure. **S2.002 S2.003** each, will not be operated when the baghouse differential pressure falls outside the range established in the operation and maintenance guidelines. The permittee will install and operate an alarm system for the **baghouse**. The alarm system will activate when the differential pressure falls outside the range set by the manufacturer. The permittee will record the time of the alarm and the time the equipment was shut down.
- (5) Monitor and record that the maintenance and operation of the **baghouse** (e.g. condition of the filter fabric) is in accordance with the manufacturer's operation and maintenance guidelines, on a weekly basis. Weekly records must show that observations were made, and records of any corrective actions taken.
- (6) The required monitoring established in (1) through (5) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.002 S2.003** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily batch rate of precious metal concentrate, in pounds, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date
  - (d) The corresponding average hourly batch rate of precious metal concentrate, in pounds per hour. The average hourly batch rate will be determined from the daily batch rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of precious metal concentrate, for each 12-month rolling period.
  - (f) The results of each visible emissions tests and any corrective action taken.
  - (g) The results of the weekly differential pressure readings for the **baghouse**.
  - (h) Date and time of any activations of the differential pressure alarm system for the **baghouse**, and any repairs and/or corrective actions taken to correct the problem.
  - (i) Results and verification of the weekly maintenance and operation of the **baghouse** and any corrective actions taken in order to maintain implementation and proper use of the **baghouse** used for control of emissions.

### **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

- J. Emission Units S2.002 S2.003 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316); NAC 445B.252 Part 70 Program (Continued)
    - b. <u>Performance/Compliance Testing</u>

Within 180 days from the date of expiration of this permit, but no earlier than 365 days from the date of expiration of this permit, the permittee will:

- (1) Conduct and record the following performance tests on the exhaust stack of the **baghouse** consisting of three valid runs at the maximum throughput rate subject to J.3. of this section.
  - (a) A Method 201A and Method 202 test in accordance with 40 CFR Part 51, Appendix M (or an alternative EPA reference method approved by the director) for  $PM_{10}$ .
  - (b) A Method 5 test with back-half catch in accordance with 40 CFR Part 60, Appendix A (or an alternative EPA reference method approved by the director) for PM.
- (2) The Method 201A and Method 202 tests required in J.4.b.(1)(a) of this section may be replaced by a Method 5 test which includes the back-half catch. All particulate captured in the Method 5 tests with back-half performed under this provision shall be considered PM<sub>10</sub> emissions for determination of compliance with the emission limitations established in J.2 of this section.
- (3) Performance tests required under J.4.b(1) of this section that are conducted below the maximum allowable throughput, as established in J.3. of this section, shall be subject to the director's review to determine if the throughput during the performance tests were sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then the director may order additional performance testing for the purpose of a compliance demonstration.
- (4) Conduct and record a Method 9 visible emissions reading on the exhaust stack of the **baghouse** concurrent with one of the three required Method 5 or Method 201A and Method 202 performance tests. Visible emissions reading shall use the procedures contained in 40 CFR Part 60, Appendix A, Method 9. The visible emissions reading must be conducted by a certified visible emissions reader for a period of 6-minutes. The opacity readings must be averaged such that compliance with a 6-minute average is determined.
- (5) Tests of performance and visible emissions readings must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance and visible emissions readings. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance and visible emissions readings unless otherwise specified in the application standard (NAC 445B.252.3).
- (6) The permittee shall give notice to the director 30 days before the tests of performance and visible emissions readings to allow the director to have an observer present. A written testing procedure for the tests of performance and visible emissions reading must be submitted to the director at least 30 days before the tests of performance and visible emissions readings to allow the director to review the proposed testing procedures (NAC.445B.252.4).
- NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>
   No Shielded Requirements

#### BUREAU OF AIR POLLUTION CONTROL

## Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

K. Emission Unit S2.004 Location North 4,456.91 km, East 523.90 km, UTM (Zone 11, NAD 83)

System 9 - Pipeline Gold Sludge Dryer

S 2.004 Electric Gold Sludge Dryer Oven (mfd by The Grieve Corp., mdl# TBH-500)

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

S2.004 has no add-on pollution controls. Emissions from S2.004 are ducted to the electrowinning cell stack.

Stack height – 65 feet Stack inside diameter – 12 inches Nominal Stack temperature – 105 <sup>0</sup>F

2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 

Emission Limits

On and after the date of startup of **S2.004**, Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack the following pollutants in excess of the following specified limits:

- a. NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.030** pounds per hour, nor more than **0.023** tons per year, based on a 12-month rolling period.
- b. NAC 445B.305 Part 70 Program The discharge of PM (particulate matter) to the atmosphere will not exceed **0.030** pounds per hour, nor more than **0.023** tons per year, based on a 12-month rolling period.
- c. NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from the stack discharge for **S2.004** will not equal or exceed **20%** in accordance with NAC 445B.22017.
- 3. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

#### Operating Parameters

- a. The maximum allowable throughput rate for **S2.004** will not exceed **0.05** tons of **electrowinning cake** per any one-hour period.
- b. The maximum allowable throughput rate for **S2.004** will not exceed **75.0** tons of **electrowinning cake** per year, based on a 12-month rolling period.
- c. System 9 may not operate concurrently with System 9A.
- d. Hours
  - (1) **S2.004** may not operate in excess of **20** hours per day
  - (2) **S2.004** may not operate in excess of **1,500** hours per calendar year.



## Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

#### K. Emission Unit S2.004 (continued)

- 4. NAC 445B.3405 (NAC 445B.316); NAC 445B.252 *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance

Permittee will:

- (1) Monitor and record the throughput rate of electrowinning cake for **S2.004** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.004** on a daily basis.
- (3) Conduct and record a visible emissions test on the **exhaust stack that ducts emissions from S2.004** in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **S2.004** is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (4) The required monitoring established in (1) through (3) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.004** is operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of electrowinning cake, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date
  - (d) The corresponding average hourly throughput rate of electrowinning cake, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of electrowinning cake, for each 12-month rolling period.
  - (f) The results of each visible emissions tests and any corrective action taken.

#### b. <u>Performance/Compliance Testing</u>

Within 180 days from the date of expiration of this permit, but no earlier than 365 days from the date of expiration of this permit, the permittee will:

- (1) Conduct and record the following performance tests on the exhaust stack that vents emissions from **S2.004** consisting of three valid runs at the maximum throughput rate subject to K.3.a. of this section.
  - (a) A Method 201A and Method 202 test in accordance with 40 CFR Part 51, Appendix M (or an alternative EPA reference method approved by the director) for PM<sub>10</sub>.
  - (b) A Method 5 test with back-half catch in accordance with 40 CFR Part 60, Appendix A (or an alternative EPA reference method approved by the director) for PM.
- (2) The Method 201A and Method 202 tests required in K.4.b.(1)(a) of this section may be replaced by a Method 5 test which includes the back-half catch. All particulate captured in the Method 5 tests with back-half performed under this provision shall be considered PM<sub>10</sub> emissions for determination of compliance with the emission limitations established in K.2 of this section.
- (3) Performance tests required under K.4.b(1) of this section that are conducted below the maximum allowable throughput, as established in K.3.a. of this section, shall be subject to the director's review to determine if the throughput during the performance tests were sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then the director may order additional performance testing for the purpose of a compliance demonstration.
- (4) Conduct and record a Method 9 visible emissions reading on the exhaust stack concurrent with one of the three required Method 5 or Method 201A and Method 202 performance tests. Visible emissions reading shall use the procedures contained in 40 CFR Part 60, Appendix A, Method 9. The visible emissions reading must be conducted by a certified visible emissions reader for a period of 6-minutes. The opacity readings must be averaged such that compliance with a 6-minute average is determined.

### **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## Section VI. Specific Operating Conditions (continued)

- K. Emission Unit S2.004 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316); NAC 445B.252 *Part 70 Program* (continued)
    - b. <u>Performance/Compliance Testing</u> (continued)
      - (5) Tests of performance and visible emissions readings must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance and visible emissions readings. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance and visible emissions readings unless otherwise specified in the application standard (NAC 445B.252.3).
      - (6) The permittee shall give notice to the director 30 days before the tests of performance and visible emissions readings to allow the director to have an observer present. A written testing procedure for the tests of performance and visible emissions reading must be submitted to the director at least 30 days before the tests of performance and visible emissions readings to allow the director to review the proposed testing procedures (NAC.445B.252.4).
  - 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program Shielded Requirements</u>
    No Shielded Requirements

### **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001 Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

**Emission Units S2.005 - S2.006** 

Sys	tem 9A -	- Reserved
S	2.005	Reserved
S	2.006	Reserved

### **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

M. Emission Units S2.007 – S2.008 Location North 4,456.91 km, East 523.97 km, UTM (Zone 11, NAD 83)

Sys	System 10 – Pipeline Carbon Reactivation Kilns		
S	2.007	Carbon Reactivation Kiln #1 (mfd by Lochhead Haggerty, mdl# B1, s/n 118-168)	
S	2.008	Carbon Reactivation Kiln #2 (mfd by Lochhead Haggerty, mdl# B1, s/n 118-170)	

1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 

Air Pollution Control Equipment

Emissions from **S2.007** – **S2.008** shall be ducted to a primary control system consisting of a venturi wet scrubber with 100% capture. The emissions from the primary control are ducted to a control system consisting of a carbon filter (sulfur impregnated carbon) with 100% capture and a maximum volume flow rate of 1,200 dry standard cubic feet per minute (dscfm), followed by ducting to the outside atmosphere. The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

Stack height – 65 feet Stack inside diameter – 9.5 inches Nominal Stack temperature – 110 °F

2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits

- a. On and after the date of startup of S2.007 S2.008, Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of the wet scrubber and carbon filter the following pollutants in excess of the following specified limits:
  - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.10** pound per hour each, nor more than **0.44** ton per year each, based on a 12-month rolling period. This limit is less than the **3.56** pounds per hour for each maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput rates as limited in M.3.a of this section.
  - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.10** pound per hour each, nor more than **0.44** ton per year each, based on a 12-month rolling period.
  - (3) NAC 445B.305 <u>Part 70 Program</u> The discharge of CO (carbon monoxide) to the atmosphere will not exceed **6.00** pounds per hour each, nor more than **26.28** tons per year each.
  - (4) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from the **wet scrubber and carbon filter exhaust stack for S2.007 S2.008** will not equal or exceed **20%** in accordance with NAC 445B.22017.
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Operating Parameters

- a. The maximum allowable throughput rate for **S2.007 S2.008** each, will not exceed **0.81** tons of **loaded carbon** per any one-hour period.
- b. Hours
  - (1) **S2.007 S2.008** each, may operate **8,760** hours per calendar year.



## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

- M. Emission Units S2.007 S2.008 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316); NAC 445B.252 Part 70 Program

Facility ID No. A0001

- a. <u>Monitoring, Record keeping and Compliance</u> Permittee will:
  - (1) Monitor and record the throughput rate of loaded carbon for \$2.007 \$2.008 each, on a daily basis.
  - (2) Monitor and record the hours of operation of **S2.007 S2.008** each, on a daily basis.
  - (3) Conduct and record a visible emissions test on the **exhaust stack of the wet scrubber** in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **S2.007 S2.008** is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
  - (4) Conduct and record a weekly reading of the venturi pressure drops and water flow rate of the **wet scrubber and carbon filter**. Record any occurrences when the venturi pressure drop or water flow rate falls outside the manufacturer's recommended operating range and record any corrective actions taken.
  - (5) The required monitoring established in (1) through (4) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.007 S2.008** each, are operating:
    - (a) The calendar date of any required monitoring.
    - (b) The total daily throughput rate of loaded carbon, in tons, for the corresponding date.
    - (c) The total daily hours of operation for the corresponding date
    - (d) The corresponding average hourly throughput rate of loaded carbon, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
    - (e) The results of each visible emissions tests and any corrective action taken.
    - (f) The results of the weekly venture pressure drop readings and water flow rate for **wet scrubber**.

### BUREAU OF AIR POLLUTION CONTROL

## Facility ID No. A0001

### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

- M. Emission Units S2.007 S2.008 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316); NAC 445B.252 *Part 70 Program* (Continued)
    - b. Performance/Compliance Testing

Within 180 days from the date of expiration of this permit, but no earlier than 365 days from the date of expiration of this permit, the permittee will:

- (1) Conduct and record the following **individual** performance tests for **S2.007** and **S2.008** on the exhaust stack of the **wet scrubber and carbon filter** consisting of three valid runs at the maximum throughput rate subject to M.3.a. of this section.
  - (a) A Method 201A and Method 202 test in accordance with 40 CFR Part 51, Appendix M (or an alternative EPA reference method approved by the director) for PM<sub>10</sub>.
  - (b) A Method 5 test with back-half catch in accordance with 40 CFR Part 60, Appendix A (or an alternative EPA reference method approved by the director) for PM.
  - (c) A Method 10 test in accordance with 40 CFR Part 60, Appendix A for CO.
- (2) The Method 201A and Method 202 tests required in M.4.b.(1)(a) of this section may be replaced by a Method 5 test which includes the back-half catch. All particulate captured in the Method 5 tests with back-half performed under this provision shall be considered PM<sub>10</sub> emissions for determination of compliance with the emission limitations established in M.2 of this section.
- (3) Performance tests required under M.4.b(1) of this section that are conducted below the maximum allowable throughput, as established in M.3.a. of this section, shall be subject to the director's review to determine if the throughput during the performance tests were sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then the director may order additional performance testing for the purpose of a compliance demonstration.
- (4) Conduct and record a Method 9 visible emissions reading on the exhaust stack of the **wet scrubber and carbon filter** concurrent with one of the three required Method 5 or Method 201A and Method 202 performance tests. Visible emissions reading shall use the procedures contained in 40 CFR Part 60, Appendix A, Method 9. The visible emissions reading must be conducted by a certified visible emissions reader for a period of 6-minutes. The opacity readings must be averaged such that compliance with a 6-minute average is determined.
- (5) Tests of performance and visible emissions readings must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance and visible emissions readings. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance and visible emissions readings unless otherwise specified in the application standard (NAC 445B.252.3).
- (6) The permittee shall give notice to the director 30 days before the tests of performance and visible emissions readings to allow the director to have an observer present. A written testing procedure for the tests of performance and visible emissions reading must be submitted to the director at least 30 days before the tests of performance and visible emissions readings to allow the director to review the proposed testing procedures (NAC.445B.252.4).
- NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>
   No Shielded Requirements

#### **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

N. Emission Units S2.009 – S2.010 Location North 4.456.91 km, East 523.96 km, UTM (Zone 11, NAD 83)

Sys	System 11 – Pipeline Carbon Stripping Vessel Heaters		
S	2.009	12.6 MMBtu/hr Propane-Fired Carbon Stripping Vessel Heater #1 (mfd by TFS, mdl# KV 2/50)	
S	2.010	12.6 MMBtu/hr Propane-Fired Carbon Stripping Vessel Heater #2 (mfd by TFS, mdl# KV 2/50)	
S	2.011	Removed	

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from **S2.009 – S2.010** each shall have no add-on controls.

2. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Emission Limits**

On and after the date of startup of S2.009 - S2.010, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stacks of S2.009 - S2.010, the following pollutants in excess of the following specified limits:

- a. NAC 445B.2203 (*Federally Enforceable SIP Requirement*) The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.57** pound per million Btu, each.
- b. NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.097** pound per hour, nor more than **0.42** ton per year, each.
- c. NAC 445B.305  $\underline{Part\ 70\ Program}$  The discharge of  $PM_{10}$  (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.097** pound per hour, nor more than **0.42** ton per year, each.
- d. NAC 445B.305 <u>Part 70 Program</u> The discharge of SO<sub>2</sub> (sulfur dioxide) to the atmosphere will not exceed **0.20** pound per hour, nor more than **0.89** ton per year, each.
- e. NAC 445B.305 <u>Part 70 Program</u> The discharge of NO<sub>x</sub> (nitrogen oxides) to the atmosphere will not exceed **1.79** pounds per hour, nor more than **7.86** tons per year, each.
- f. NAC 445B.305 <u>Part 70 Program</u> The discharge of CO (carbon monoxide) to the atmosphere will not exceed **1.04** pounds per hour, nor more than **4.53** tons per year, each.
- g. NAC 445B.305 <u>Part 70 Program</u> The discharge of VOC (volatile organic compounds) to the atmosphere will not exceed **0.11** pound per hour, nor more than **0.48** ton per year, each.
- h. NAC 445B.22047 (*Federally Enforceable SIP Requirement*) The maximum allowable discharge of sulfur to the atmosphere will not exceed **8.82** pounds per hour, each.
- i. NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from each exhaust stack of **S2.009 S2.010** will not equal or exceed **20%** in accordance with NAC 445B.22017.

#### 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. **S2.009 S2.010** each, will combust propane as the primary fuel and will not exceed **138** gallons of propane combusted per hour.
- b. The maximum operating heat input for **S2.009 S2.010** each, while combusting propane will not exceed **12.6** million Btu per any one-hour period (MMBTU/hr).
- c. Hours
  - S2.009 S2.010 each, may operate 8,760 hours per calendar year.



## Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

### **Section VI. Specific Operating Conditions (continued)**

- N. Emission Units S2.009 S2.010 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316); NAC 445B.252 Part 70 Program
    - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the propane consumption rate for **S2.009 S2.010** each, on a daily basis.
- (2) Monitor and record the hours of operation for **S2.009 S2.010** each, on a daily basis.
- (3) Conduct and record a visible emissions test on the **exhaust stacks of S2.009 S2.010** in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **S2.009 S2.010** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (4) The required monitoring established in (1) through (3) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.009 S2.010** are operating.
  - (a) The calendar date of any required monitoring.
  - (b) The total daily hours of operation for the corresponding date.
  - (c) The total daily fuel consumption rate of propane, in gallons, for the corresponding date.
  - (d) The corresponding average hourly fuel consumption rate of propane, in gallons per hour. The average hourly fuel consumption rate will be determined from the daily fuel consumption rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The results of each monthly visible emissions tests and any corrective action taken.

#### b. Performance/Compliance Testing

Within 180 days from the date of expiration of this permit, but no later than 365 days from the date of expiration of this permit, the permittee will:

- (1) Conduct and record the following performance tests on each exhaust stack of **S2.009 S2.010** consisting of three valid runs at the maximum throughput rate subject to N.3 of this section.
  - (a) A Method 7 test in accordance with 40 CFR Part 60, Appendix A for NOx.
  - (b) A Method 10 test in accordance with 40 CFR Part 60, Appendix A for CO.
- (2) Performance tests required under N.4.b(1) of this section that are conducted below the maximum allowable throughput, as established in N.3 of this section, shall be subject to the director's review to determine if the throughput during the performance tests were sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then the director may order additional performance testing for the purpose of a compliance demonstration.
- (3) Conduct and record a Method 9 visible emissions reading on each exhaust stack of **S2.009 S2.010** concurrent with one of the three required performance tests. Visible emissions reading shall use the procedures contained in 40 CFR Part 60, Appendix A, Method 9. The visible emissions reading must be conducted by a certified visible emissions reader for a period of 6-minutes. The opacity readings must be averaged such that compliance with a 6-minute average is determined.
- (4) Tests of performance and visible emissions readings must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance and visible emissions readings. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance and visible emissions readings unless otherwise specified in the application standard (NAC 445B.252.3).
- (5) The permittee shall give notice to the director 30 days before the tests of performance and visible emissions readings to allow the director to have an observer present. A written testing procedure for the tests of performance and visible emissions reading must be submitted to the director at least 30 days before the tests of performance and visible emissions readings to allow the director to review the proposed testing procedures (NAC.445B.252.4).



## Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

### **Section VI. Specific Operating Conditions (continued)**

- N. Emission Units S2.009 S2.010 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316); NAC 445B.252 Part 70 Program continued
    - New Source Performance Standards (NSPS) Notification and Recordkeeping 40 CFR Part 60, Section 60.7(b); 40 CFR Part 60.48c (Subpart Dc, "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units").

Upon issuance of this permit (permit issued April 8, 2013) and the revision (increasing the heat input from 8.0 MMBtu/hr to 12.6 MMBtu) of S2.009 – S2.010, the Permittee shall:

- (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- (2) Pursuant to 40 CFR Part 60, Subpart Dc, Section 60.48c(g) and 60.48c(i), facility shall record and maintain readily accessible records of the amounts of propane combusted during each day of operation for **S2.009 S2.010** each. The records shall be kept for a period of 2 years following the date of such record.
- (3) Pursuant to 40 CFR Part 60, Subpart Dc, Section 60.48c(j), facility shall report the results in 4.c.(2) of this section every 6 months. The reports shall be submitted to the Administrator and shall be postmarked by the 30<sup>th</sup> day following the end of the reporting period.
- NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>
   No Shielded Requirements

### **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

Emission Units S2.012 and PF1.028 Location North 4.456.87 km, East 524.13 km, UTM (Zone 11, NAD 83)

System 12 – Pipeline Mill 50 Ton Pebble Lime Silo			
S	2.012	Pebble Lime Silo pneumatic loading	
PF	1.028	Pebble Lime Silo unloading to enclosed Screw Conveyor	

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from S2.012 shall be ducted to a control system consisting of a bin vent with 100% capture.

Emissions from PF1.028 will be controlled by a full enclosure that completely encloses this transfer point.

2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 

#### **Emission Limits**

a. NAC 445B.305 Part 70 Program

On and after the date of startup of **S2.012**, Permittee will not discharge or cause the discharge into the atmosphere from the bin vent of **S2.012**, the following pollutants in excess of the following specified limits:

- (1) The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.012** pound per hour, nor more than **0.001** ton per year, based on a 12-month rolling period. This limit is less than the **41.32** pounds per hour for the maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited in O.3.a. of this section.
- (2) The discharge of PM (particulate matter) to the atmosphere will not exceed **0.035** pound per hour, nor more than **0.004** ton per year, based on a 12-month rolling period.
- (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from the **bin vent discharge of S2.012** will not equal or exceed **20%** in accordance with NAC 445B.22017.
- b. NAC 445B.305 *Part 70 Program*

On and after the date of startup of **PF1.028**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.028**, the following pollutants in excess of the following specified limits:

- (1) The discharge of PM<sub>10</sub> to the atmosphere will not exceed **0.00** pound per hour, nor more than **0.00** ton per year, based on a 12-month rolling period. This limit is less than the **10.38** pounds per hour for the maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited in O.3.c. of this section.
- (2) The discharge of PM to the atmosphere will not exceed **0.00** pound per hour, nor more than **0.00** ton per year, based on a 12-month rolling period.
- (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from **PF1.028** will not equal or exceed **20%** in accordance with NAC 445B.22017.

#### 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. The maximum allowable loading rate for **S2.012** will not exceed **35.0** tons of **lime** per any one-hour period.
- b. The maximum annual loading rate for S2.012 will not exceed 8,760.0 tons of lime per year, based on a 12-month rolling period.
- c. The maximum allowable discharge rate for **PF1.028** will not exceed **4.0** tons of **lime** per any one-hour period.
- d. The maximum annual discharge rate for **PF1.028** will not exceed **8,760.0** tons of **lime** per year, based on a 12-month rolling period.
- e. Hours
  - (1) S2.012 may operate 24 hours per day, but no more than 500 hours per calendar year.
  - (2) **PF1.028** may operate **8,760** hours per calendar year.



## Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

- O. Emission Units S2.012 and PF1.028 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - a. Monitoring, Record keeping and Compliance
      - The Permittee, upon issuance of this operating permit will:
      - (1) Monitor and record the loading rate of lime for **S2.012** on a daily basis.
      - (2) Monitor and record the discharge rate of lime for **PF1.028** on a daily basis.
      - (3) Monitor and record the hours of operation of **S2.012 and PF1.028** on a daily basis.
      - (4) Conduct a monthly inspection of the **bin vent on S2.012** in accordance with the manufacturer's operation and maintenance manual and record the results (e.g. the condition of the filter fabric) and any corrective actions taken.
      - (5) Conduct a monthly inspection of the **enclosure on PF1.028** and record the results and any corrective action taken.
      - (6) Conduct and record a visible emissions test on the **bin vent of S2.012 and enclosure of PF1.028**, in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a monthly basis for any month or a portion thereof that **S2.012 and PF1.028** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
      - (7) The required monitoring established in (1) through (6) above will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.012 and PF1.028** is operating:
        - (a) The calendar date of any required monitoring.
        - (b) The total daily loading rate of lime, in tons, for the corresponding date.
        - (c) The total daily discharge rate of lime, in tons, for the corresponding date.
        - (d) The total daily loading hours of operation for the corresponding date.
        - (e) The total daily discharge hours of operation for the corresponding date.
        - (f) The corresponding average hourly loading rate of lime, in tons per hour. The average hourly loading rate will be determined from the daily loading rate and the total daily hours of operation recorded in (b) and (d) above.
        - (g) The cumulative monthly loading rate of lime, for each 12-month rolling period.
        - (h) The corresponding average hourly discharge rate of lime, in tons per hour. The average hourly discharge rate will be determined from the daily discharge rate and the total daily hours of operation recorded in (c) and (e) above.
        - (i) Results and verification of the monthly inspections on the bin vent for S2.012 and enclosure for PF1.028, and any corrective actions taken in order to maintain implementation and proper use of the bin vent and enclosure system used for control of emissions.
        - (j) The results of each visible emissions tests and any corrective action taken.
  - 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Shielded Requirements

### **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

P. Emission Units S2.013a – S2.013p Location North 4.456.96 km, East 523.97 km, UTM (Zone 11, NAD 83)

System 13 – Pipeline Assay Laboratory Sample Preparation			
S	2.013a	Automatic Ring Pulverizer 1	
S	2.013b	Automatic Ring Pulverizer 2	
S	2.013c	Manual Ring Pulverizer 1	
S	2.013d	Manual Ring Pulverizer 2	
S	2.013e	Manual BICO Disk Pulverizer	
S	2.013f	Automatic Jaw Crusher/Pulverizer/Splitter 1	
S	2.013g	Automatic Jaw Crusher/Pulverizer/Splitter 2	
S	2.013h	Manual Rhino Jaw Crusher 1	
S	2.013i	Manual Splitter 1	
S	2.013j	Reject Conveyor	
S	2.013k	Manual Rino Jaw Crusher 2	
S	2.0131	Manual Splitter 2	
S	2.013m	Manual Splitter 3	
S	2.013n	Automatic Jaw Crusher/Pulverizer/Splitter 3	
S	2.0130	Manual Jaw Crusher	
S	2.013p	Gilson Screen Deck	

#### 1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

Air Pollution Control Equipment

Emissions from **S2.013a** – **S2.013p** shall be controlled by a **baghouse** with 100% capture and a maximum volume flow rate of 11,857 dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

Stack height – 25 feet

Stack inside diameter – 2.1 feet

Stack temperature – ambient

### 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

#### Emission Limits

- a. On and after the date of startup of S2.013a S2.013p, Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of the baghouse the following pollutants in excess of the following specified limits:
  - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **2.03** pounds per hour, nor more than **8.90** tons per year, based on a 12-month rolling period. This limit is less than the **23.06** pounds per hour maximum allowable emission limit for **System 13** as determined from NAC 445B.22033 and the combined maximum allowable throughput rates as limited in P.3.a of this section.
  - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **2.03** pounds per hour, nor more than **8.90** tons per year, based on a 12-month rolling period.
  - (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from the **baghouse that controls S2.013a S2.013p** will not equal or exceed **20%** in accordance with NAC 445B.22017.

### **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

- P. Emission Units S2.013a S2.013p (continued)
  - 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### Operating Parameters

- a. The maximum allowable throughput rate for \$2.013a \$2.013p each, will not exceed 0.21 tons of rock samples per any one-hour period.
- b. The maximum allowable throughput rate for **S2.013a S2.013p** combined, will not exceed **0.21** tons of **rock samples** per any one-hour period.
- c. Hours
  - (1) **S2.013a S2.013p** each, may operate **8,760** hours per calendar year.
- 4. NAC 445B.3405 (NAC 445B.316); NAC 445B.252 *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance

Permittee will:

- (1) Monitor and record the throughput rate of **rock samples** for **S2.013a S2.013p** each and combined, on a daily basis.
- (2) Monitor and record the hours of operation of **S2.013a S2.013p** each, on a daily basis.
- (3) Conduct and record a visible emissions test on the **exhaust stacks of the baghouse** in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **S2.013a S2.013p** is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (4) Conduct and record a weekly reading of differential pressure on the **baghouse**, and verify that it is within the range established by the manufacturer; record the time of the reading and the differential pressure. **S2.013a S2.013p** each, will not be operated when the baghouse differential pressure falls outside the range established in the operation and maintenance guidelines. The permittee will install and operate an alarm system for the **baghouse**. The alarm system will activate when the differential pressure falls outside the range set by the manufacturer. The permittee will record the time of the alarm and the time the equipment was shut down.
- (5) Monitor and record that the maintenance and operation of the **baghouse** (e.g. condition of the filter fabric) is in accordance with the manufacturer's operation and maintenance guidelines, on a weekly basis. Weekly records must show that observations were made, and records of any corrective actions taken.
- (6) The required monitoring established in (1) through (5) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.013a S2.013p** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of rock samples, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date
  - (d) The corresponding average hourly throughput rate of rock samples, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The results of each visible emissions tests and any corrective actions taken.
  - (f) The results of the weekly differential pressure readings for the **baghouse**.
  - (g) Date and time of any activations of the differential pressure alarm system for the **baghouse**, and any repairs and/or corrective actions taken to correct the problem.
  - (h) Results and verification of the weekly maintenance and operation of the **baghouse** and any corrective actions taken in order to maintain implementation and proper use of the **baghouse** used for control of emissions.

### BUREAU OF AIR POLLUTION CONTROL

## Facility ID No. A0001

### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

- P. Emission Units S2.013a S2.013p (continued)
  - 4. NAC 445B.3405 (NAC 445B.316); NAC 445B.252 *Part 70 Program* (continued)
    - b. <u>Performance/Compliance Testing</u>

Within 180 days from the date of expiration of this permit, but no earlier than 365 days from the date of expiration of this permit, the permittee will:

- (1) Conduct and record the following performance tests on the exhaust stack of the **baghouse** consisting of three valid runs at the maximum throughput rate subject to P.3. of this section.
  - (a) A Method 201A and Method 202 test in accordance with 40 CFR Part 51, Appendix M (or an alternative EPA reference method approved by the director) for  $PM_{10}$ .
  - (b) A Method 5 test with back-half catch in accordance with 40 CFR Part 60, Appendix A (or an alternative EPA reference method approved by the director) for PM.
- (2) The Method 201A and Method 202 tests required in P.4.b.(1)(a) of this section may be replaced by a Method 5 test which includes the back-half catch. All particulate captured in the Method 5 tests with back-half performed under this provision shall be considered PM<sub>10</sub> emissions for determination of compliance with the emission limitations established in P.2 of this section.
- (3) Performance tests required under P.4.b(1) of this section that are conducted below the maximum allowable throughput, as established in P.3. of this section, shall be subject to the director's review to determine if the throughput during the performance tests were sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then the director may order additional performance testing for the purpose of a compliance demonstration.
- (4) Conduct and record a Method 9 visible emissions reading on the exhaust stack of **baghouse** concurrent with one of the three required Method 5 or Method 201A and Method 202 performance tests. Visible emissions reading shall use the procedures contained in 40 CFR Part 60, Appendix A, Method 9. The visible emissions reading must be conducted by a certified visible emissions reader for a period of 6-minutes. The opacity readings must be averaged such that compliance with a 6-minute average is determined.
- (5) Tests of performance and visible emissions readings must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance and visible emissions readings. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance and visible emissions readings unless otherwise specified in the application standard (NAC 445B.252.3).
- (6) The permittee shall give notice to the director 30 days before the tests of performance and visible emissions readings to allow the director to have an observer present. A written testing procedure for the tests of performance and visible emissions reading must be submitted to the director at least 30 days before the tests of performance and visible emissions readings to allow the director to review the proposed testing procedures (NAC.445B.252.4).
- NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>

   No Shielded Requirements

### BUREAU OF AIR POLLUTION CONTROL

## Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

Q. Emission Units S2.018a – S2.018q Location North 4.456.97 km, East 523.97 km, UTM (Zone 11, NAD 83)

Sys	System 14 - Pipeline Assay Laboratory Furnaces		
S	2.018a	Fire Assay Fusion Furnace 1, mfd by DFC Ceramics, mdl# 810B	
S	2.018b	Fire Assay Fusion Furnace 2, mfd by DFC Ceramics, mdl# 810B	
S	2.018c	Fire Assay Fusion Furnace 3, mfd by DFC Ceramics, mdl# 810B	
S	2.018d	Fire Assay Fusion Furnace 4, mfd by DFC Ceramics, mdl# 810B	
S	2.018e	Fire Assay Fusion Furnace 5, mfd by DFC Ceramics, mdl# 810B	
S	2.018f	Fire Assay Fusion Furnace 6, mfd by DFC Ceramics, mdl# 810B	
S	2.018g	Fire Assay Lab Modular Furnace, mfd by MAS	

#### 1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

#### Air Pollution Control Equipment

Emissions from **S2.018a** – **S2.018g** shall be controlled by a **baghouse** with 100% capture and a maximum volume flow rate of 11,125 dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

Stack height – 25 feet

Stack inside diameter – 2.1 feet

Nominal Stack temperature – 121 <sup>0</sup>F

### 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

#### **Emission Limits**

- a. On and after the date of startup of **S2.018a S2.018g**, Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of the baghouse the following pollutants in excess of the following specified limits:
  - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **1.91** pounds per hour, nor more than **8.35** tons per year, based on a 12-month rolling period. This limit is less than the **2.22** pounds per hour maximum allowable emission limit for **System 14** as determined from NAC 445B.22033 and the combined maximum allowable throughput rates as limited in Q.3.a of this section.
  - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **1.91** pounds per hour, nor more than **8.35** tons per year, based on a 12-month rolling period.
  - (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from the **baghouse that controls** S2.018a S2.018g will not equal or exceed 20% in accordance with NAC 445B.22017.

### 3. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

### Operating Parameters

- a. The maximum allowable throughput rate for \$2.018a \$2.018g each, will not exceed 0.022 tons of flux and rock samples per any one-hour period.
- b. The maximum allowable throughput rate for S2.018a S2.018g combined, will not exceed 0.022 tons of flux and rock samples per any one-hour period.
- c. Hours
  - (1) **S2.018a S2.018g** each, may operate **8,760** hours per calendar year.



## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

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## **Section VI. Specific Operating Conditions** (continued)

- Q. Emission Units S2.018a S2.018g (continued)
  - 4. NAC 445B.3405 (NAC 445B.316); NAC 445B.252 *Part 70 Program* 
    - a. Monitoring, Record keeping and Compliance

Permittee will:

- (1) Monitor and record the throughput rate of **flux and rock samples** for **S2.018a S2.018g** each and combined, on a daily basis.
- (2) Monitor and record the hours of operation of **S2.018a S2.018g** each, on a daily basis.
- (3) Conduct and record a visible emissions test on the **exhaust stacks of the baghouse** in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **S2.018a S2.018g** is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (4) Conduct and record a weekly reading of differential pressure on the **baghouse**, and verify that it is within the range established by the manufacturer; record the time of the reading and the differential pressure. **S2.018a S2.018g** each, will not be operated when the baghouse differential pressure falls outside the range established in the operation and maintenance guidelines. The permittee will install and operate an alarm system for the **baghouse**. The alarm system will activate when the differential pressure falls outside the range set by the manufacturer. The permittee will record the time of the alarm and the time the equipment was shut down.
- (5) Monitor and record that the maintenance and operation of the **baghouse** (e.g. condition of the filter fabric) is in accordance with the manufacturer's operation and maintenance guidelines, on a weekly basis. Weekly records must show that observations were made, and records of any corrective actions taken.
- (6) The required monitoring established in (1) through (5) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.018a S2.018g** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of flux and rock samples, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date
  - (d) The corresponding average hourly throughput rate of flux and rock samples, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The results of each visible emissions tests and any corrective actions taken.
  - (f) The results of the weekly differential pressure readings for the **baghouse**.
  - (g) Date and time of any activations of the differential pressure alarm system for the **baghouse**, and any repairs and/or corrective actions taken to correct the problem.
  - (h) Results and verification of the weekly maintenance and operation of the **baghouse** and any corrective actions taken in order to maintain implementation and proper use of the **baghouse** used for control of emissions.

### BUREAU OF AIR POLLUTION CONTROL

## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

- Q. Emission Units S2.018a S2.018g (continued)
  - 4. NAC 445B.3405 (NAC 445B.316); NAC445B.252 *Part 70 Program* (continued)
    - b. <u>Performance/Compliance Testing</u>

Within 180 days from the date of expiration of this permit, but no earlier than 365 days from the date of expiration of this permit, the permittee will:

- (1) Conduct and record the following performance tests on the exhaust stack of the **baghouse** consisting of three valid runs at the maximum throughput rate subject to Q.3. of this section.
  - (a) A Method 201A and Method 202 test in accordance with 40 CFR Part 51, Appendix M (or an alternative EPA reference method approved by the director) for PM<sub>10</sub>.
  - (b) A Method 5 test with back-half catch in accordance with 40 CFR Part 60, Appendix A (or an alternative EPA reference method approved by the director) for PM.
- (2) The Method 201A and Method 202 tests required in Q.4.b.(1)(a) of this section may be replaced by a Method 5 test which includes the back-half catch. All particulate captured in the Method 5 tests with back-half performed under this provision shall be considered PM<sub>10</sub> emissions for determination of compliance with the emission limitations established in Q.2 of this section.
- (3) Performance tests required under Q.4.b(1) of this section that are conducted below the maximum allowable throughput, as established in Q.3. of this section, shall be subject to the director's review to determine if the throughput during the performance tests were sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then the director may order additional performance testing for the purpose of a compliance demonstration.
- (4) Conduct and record a Method 9 visible emissions reading on the exhaust stack of **baghouse** concurrent with one of the three required Method 5 or Method 201A and Method 202 performance tests. Visible emissions reading shall use the procedures contained in 40 CFR Part 60, Appendix A, Method 9. The visible emissions reading must be conducted by a certified visible emissions reader for a period of 6-minutes. The opacity readings must be averaged such that compliance with a 6-minute average is determined.
- (5) Tests of performance and visible emissions readings must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance and visible emissions readings. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance and visible emissions readings unless otherwise specified in the application standard (NAC 445B.252.3).
- (6) The permittee shall give notice to the director 30 days before the tests of performance and visible emissions readings to allow the director to have an observer present. A written testing procedure for the tests of performance and visible emissions reading must be submitted to the director at least 30 days before the tests of performance and visible emissions readings to allow the director to review the proposed testing procedures (NAC.445B.252.4).
- NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>

   No Shielded Requirements

### **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

R. Emission Units PF1.029 - PF1.037 Location North 4,453.98 km, East 524.12 km, UTM (Zone 11, NAD 83)

Syst	System 15 – Pipeline Portable Crushing & Screening System, Metallic Ore Operating Scenario		
PF	1.029	Truck Dump of Metallic Ore to Primary Jaw Crusher with Grizzly	
PF	1.030	Primary Jaw Crusher (mfd by El-Russ Aggregate Systems)	
PF	1.031	Primary Jaw Crusher transfer of Metallic Ore to Conveyor C-1	
PF	1.032	Conveyor C-1 transfer of Metallic Ore to Conveyor C-2	
PF	1.033	Conveyor C-2 transfer of Metallic Ore to 3-Deck Screen	
PF	1.034	3-Deck Screen (mfd by El-Russ Aggregate Systems)	
PF	1.035	3-Deck Screen transfer of Metallic Ore to Conveyor C-3	
PF	1.036	3-Deck Screen transfer of Metallic Ore to Conveyor C-6	
PF	1.037	3-Deck Screen transfer of Metallic Ore to Conveyor C-9	

#### 1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from **PF1.029 - PF1.037** are controlled by the ore material containing at least **4% moisture**. The metallic ore material must be sampled twice per shift during operations, sampled upstream from the **Jaw Crusher** (**PF1.030**), and analyzed for moisture content.

#### 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Emission Limits</u>

- a. On and after the date of startup of **PF1.029 PF1.037**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.029 PF1.037**, the following pollutants in excess of the following specified limits:
  - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **3.60** pounds per hour combined, nor more than **5.62** tons per year combined, based on a 12-month rolling period. This limit is less than the **66.31** pounds per hour maximum allowable emission limit for **System 15** as determined from NAC 445B.22033 and the maximum allowable throughput as limited in R.3.a of this section.
  - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **8.00** pounds per hour combined, nor more than **12.50** tons per year combined, based on a 12-month rolling period.
  - (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from **PF1.029 PF1.037** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.
- b. New Source Performance Standards (NSPS) Subpart LL Standards of Performance for Metallic Mineral Processing Plants (40 CFR Part 60.380)

On and after the sixtieth day after achieving the maximum production rate at which **System 15** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Process fugitive emissions from **PF1.029 PF1.037** each, will not exceed **10%** opacity (40 CFR Part 60.382(b)).
- (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- (3) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.029 PF1.037** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).

### **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

- R. Emission Units PF1.029 PF1.037 (continued)
  - 3. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Operating Parameters
    - a. The maximum allowable throughput rate for **PF1.029 PF1.034** each, will not exceed **400.0** tons of **as fed ore** per any one-hour period.
    - b. The maximum annual throughput rate for **PF1.029 PF1.034** each, will not exceed **1,250,000.0** tons of **as fed ore** per year, based on a 12-month rolling period.
    - c. The maximum allowable throughput rate for **PF1.035 PF1.037** each, will not exceed **300.0** tons of **as fed ore** per any one-hour period.
    - d. The maximum annual throughput rate for **PF1.035 PF1.037** each, will not exceed **1,250,000.0** tons of **as fed ore** per year, based on a 12-month rolling period.
    - e. Hours

PF1.029 - PF1.037 each, may operate 8,760 hours per calendar year.

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of as fed ore for PF1.029 PF1.037 each, on a daily basis.
- (2) Monitor and record the hours of operation for **PF1.029 PF1.037** each, on a daily basis.
- (3) Monitor and record the throughput rate of as fed ore for **PF1.029 PF1.037** each, on a cumulative monthly basis, for each 12-month rolling period.
- (4) Monitor the metallic ore moisture content upstream from the **Jaw Crusher (PF1.030)**, on a twice per shift basis.
- (5) Conduct and record a visible emissions test on **PF1.029 PF1.037** each, in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **PF1.029 PF1.037** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (6) The required monitoring established in (1) through (5) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.029 PF1.037** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of as fed ore, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of as fed ore, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of as fed ore, for each 12-month rolling period.
  - (f) Results and verification of the metallic ore moisture content on a twice per shift basis.
  - (g) The results of each visible emissions tests and any corrective action taken.
- b. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b))

The permittee, upon issuance date of this permit, shall:

- (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) Part 70 Program

**Shielded Requirements** 



## Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

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## **Section VI. Specific Operating Conditions (continued)**

S. Emission Units PF1.029A – PF1.037A Location North 4,453.98 km, East 524.12 km, UTM (Zone 11, NAD 83)

Syst	System 15A – Pipeline Portable Crushing & Screening System, Aggregate Operating Scenario			
PF	1.029A	Truck Dump of Aggregate to Primary Jaw Crusher with Grizzly		
PF	1.030A	Primary Jaw Crusher (mfd by El-Russ Aggregate Systems)		
PF	1.031A	Primary Jaw Crusher transfer of Aggregate to Conveyor C-1		
PF	1.032A	Conveyor C-1 transfer of Aggregate to Conveyor C-2		
PF	1.033A	Conveyor C-2 transfer of Aggregate to 3-Deck Screen		
PF	1.034A	3-Deck Screen (mfd by El-Russ Aggregate Systems)		
PF	1.035A	3-Deck Screen transfer of Aggregate to Conveyor C-3		
PF	1.036A	3-Deck Screen transfer of Aggregate to Conveyor C-6		
PF	1.037A	3-Deck Screen transfer of Aggregate to Conveyor C-9		

. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 

Air Pollution Control Equipment

Emissions from **PF1.029A - PF1.037A** are controlled by best operating practices

- 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
  - a. On and after the date of startup of **PF1.029A PF1.037A**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.029A PF1.037A**, the following pollutants in excess of the following specified limits:
    - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **4.71** pounds per hour combined, nor more than **7.36** tons per year combined, based on a 12-month rolling period. This limit is less than the **66.31** pounds per hour maximum allowable emission limit for **System 15A** as determined from NAC 445B.22033 and the maximum allowable throughput as limited in S.3.a of this section.
    - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed 12.74 pounds per hour combined, nor more than 19.90 tons per year combined, based on a 12-month rolling period.
    - (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from **PF1.029A PF1.037A** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.
  - b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)

On and after the sixtieth day after achieving the maximum production rate at which **System 15A** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Process fugitive emissions from **PF1.029A PF1.031A** each, will not exceed **15%** opacity (40 CFR Part 60.672(c)).
- (2) Process fugitive emissions from **PF1.032A PF1.037A** each, will not exceed **10%** opacity (40 CFR Part 60.672(b)).
- (3) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- (4) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.029A PF1.037A** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).

## **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

- S. Emission Units PF1.029A PF1.037A (continued)
  - 3. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Operating Parameters
    - a. The maximum allowable throughput rate for **PF1.029A PF1.034A** each, will not exceed **400.0** tons of **aggregate** per any one-hour period.
    - b. The maximum annual throughput rate for **PF1.029A PF1.034A** each, will not exceed **1,250,000.0** tons of **aggregate** per year, based on a 12-month rolling period.
    - c. The maximum allowable throughput rate for **PF1.035A PF1.037A** each, will not exceed **300.0** tons of **aggregate** per any one-hour period.
    - d. The maximum annual throughput rate for **PF1.035A PF1.037A** each, will not exceed **1,250,000.0** tons of **aggregate** per year, based on a 12-month rolling period.
    - e. Hours

PF1.029A - PF1.037A each, may operate 8,760 hours per calendar year.

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of aggregate for **PF1.029A PF1.037A** each, on a daily basis.
- (2) Monitor and record the hours of operation for PF1.029A PF1.037A each, on a daily basis.
- (3) Monitor and record the throughput rate of aggregate for **PF1.029A PF1.037A** each, on a cumulative monthly basis, for each 12-month rolling period.
- (4) Conduct and record a visible emissions test on **PF1.029A PF1.037A** each, in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **PF1.029A PF1.037A** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (5) The required monitoring established in (1) through (4) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.029A PF1.037A** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of aggregate, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of aggregate, for each 12-month rolling period.
  - (f) The results of each visible emissions tests and any corrective action taken.
- b. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b)) The permittee, upon issuance date of this permit, shall:
  - (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) Part 70 Program

**Shielded Requirements** 



## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

T. Emission Units PF1.038 – PF1.042 Location North 4,453.96 km, East 524.09 km, UTM (Zone 11, NAD 83)

Syst	System 16 – Pipeline Portable Crushing & Screening System, Metallic Ore Operating Scenario			
PF	1.038	Conveyor C-9 transfer of Metallic Ore to Conveyor C-10		
PF	1.039	Conveyor C-10 transfer of Metallic Ore to Secondary Cone Crusher		
PF	1.040	Secondary Cone Crusher (mfd by Allis, mdl# H4000)		
PF	1.041	Secondary Cone Crusher transfer of Metallic Ore to Conveyor C-11		
PF	1.042	Conveyor C-11 transfer of Metallic Ore to 3-Deck Screen (PF1.034)		

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from **PF1.038 - PF1.042** are controlled by the ore material containing at least **4% moisture**. The metallic ore material must be sampled twice per shift during operations, sampled upstream from the **Secondary Cone Crusher** (**PF1.040**), and analyzed for moisture content.

2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits

- a. On and after the date of startup of **PF1.038 PF1.042**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.038 PF1.042**, the following pollutants in excess of the following specified limits:
  - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **6.00** pounds per hour combined, nor more than **12.50** tons per year combined, based on a 12-month rolling period. This limit is less than the **63.00** pounds per hour maximum allowable emission limit for **System 16** as determined from NAC 445B.22033 and the maximum allowable throughput as limited in T.3.a. of this section.
  - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **15.00** pounds per hour combined, nor more than **31.25** tons per year combined, based on a 12-month rolling period.
  - (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from **PF1.038 PF1.042** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.
- b. New Source Performance Standards (NSPS) Subpart LL Standards of Performance for Metallic Mineral Processing Plants (40 CFR Part 60.380)

On and after the sixtieth day after achieving the maximum production rate at which **System 16** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Process fugitive emissions from **PF1.038 PF1.042** each, will not exceed **10%** opacity (40 CFR Part 60.382(b)).
- (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- (3) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.038 PF1.042** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).

### BUREAU OF AIR POLLUTION CONTROL

## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## Section VI. Specific Operating Conditions (continued)

- T. Emission Units PF1.038 PF1.042 (continued)
  - 3. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Operating Parameters
    - a. The maximum allowable throughput rate for **PF1.038 PF1.042** each, will not exceed **300.0** tons of **as fed ore** per any one-hour period.
    - b. The maximum annual throughput rate for **PF1.038 PF1.042** each, will not exceed **1,250,000.0** tons of **as fed ore** per year, based on a 12-month rolling period.
    - c. Hours

PF1.038 - PF1.042 each, may operate 8,760 hours per calendar year.

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of as fed ore for PF1.038 PF1.042 each, on a daily basis.
- (2) Monitor and record the hours of operation for PF1.038 PF1.042 each, on a daily basis.
- (3) Monitor and record the throughput rate of as fed ore for **PF1.038 PF1.042** each, on a cumulative monthly basis, for each 12-month rolling period.
- (4) Monitor the metallic ore moisture content upstream from the **Secondary Cone Crusher (PF1.040)**, on a twice per shift basis.
- (5) Conduct and record a visible emissions test on **PF1.038 PF1.042** each, in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **PF1.038 PF1.042** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (6) The required monitoring established in (1) through (5) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.038 PF1.042** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of as fed ore, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of as fed ore, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of as fed ore, for each 12-month rolling period.
  - (f) Results and verification of the metallic ore moisture content on a twice per shift basis.
  - (g) The results of each visible emissions tests and any corrective action taken.
- b. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b))

The permittee, upon issuance date of this permit, shall:

- (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

**Shielded Requirements** 



## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

U. Emission Units PF1.038A - PF1.042A Location North 4.453.96 km, East 524.09 km, UTM (Zone 11, NAD 83)

Syst	System 16A – Pipeline Portable Crushing & Screening System, Aggregate Operating Scenario		
PF	1.038A	Conveyor C-9 transfer of Aggregate to Conveyor C-10	
PF	1.039A	Conveyor C-10 transfer of Aggregate to Secondary Cone Crusher	
PF	1.040A	Secondary Cone Crusher (mfd by Allis, mdl# H4000)	
PF	1.041A	Secondary Cone Crusher transfer of Aggregate to Conveyor C-11	
PF	1.042A	Conveyor C-11 transfer of Aggregate to 3-Deck Screen (PF1.034A)	

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from **PF1.038A - PF1.042A** are controlled by best operating practices.

2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits

- a. On and after the date of startup of **PF1.038A PF1.042A**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.038A PF1.042A**, the following pollutants in excess of the following specified limits:
  - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.92** pounds per hour combined, nor more than **1.93** tons per year combined, based on a 12-month rolling period. This limit is less than the **63.00** pounds per hour maximum allowable emission limit for **System 16A** as determined from NAC 445B.22033 and the combined maximum allowable throughput as limited in U.3.a. of this section.
  - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **2.05** pounds per hour combined, nor more than **4.28** tons per year combined, based on a 12-month rolling period.
  - (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from **PF1.038A PF1.042A** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.
- b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)

On and after the sixtieth day after achieving the maximum production rate at which **System 16A** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Process fugitive emissions from **PF1.038A and PF1.042A** each, will not exceed **15%** opacity (40 CFR Part 60.672(c)).
- (2) Process fugitive emissions from **PF1.039A PF1.041A** each, will not exceed **10%** opacity (40 CFR Part 60.672(b)).
- (3) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- (4) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.038A PF1.042A** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).

## **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

- U. Emission Units PF1.038A PF1.042A (continued)
  - 3. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

**Operating Parameters** 

- a. The maximum allowable throughput rate for **PF1.038A PF1.042A** each, will not exceed **300.0** tons of **aggregate** per any one-hour period.
- b. The maximum annual throughput rate for **PF1.038A PF1.042A** each, will not exceed **1,125,000.0** tons of **aggregate** per year, based on a 12-month rolling period.
- c. Hours

PF1.038A - PF1.042A each, may operate 8,760 hours per year.

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of aggregate for **PF1.038A PF1.042A** each, on a daily basis.
- (2) Monitor and record the hours of operation for PF1.038A PF1.042A each, on a daily basis.
- (3) Monitor and record the throughput rate of aggregate for **PF1.038A PF1.042A** each, on a cumulative monthly basis, for each 12-month rolling period.
- (4) Conduct and record a visible emissions test on **PF1.038A PF1.042A** each, in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **PF1.038A PF1.042A** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (5) The required monitoring established in (1) through (4) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.038A PF1.042A** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of aggregate, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of aggregate, for each 12-month rolling period.
  - (f) The results of each visible emissions tests and any corrective action taken.
- b. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b)) The permittee, upon issuance date of this permit, shall:
  - (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

Shielded Requirements



## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

V. Emission Units PF1.043 - PF1.048 Location North 4,453.91 km, East 524.12 km, UTM (Zone 11, NAD 83)

Syst	System 17 – Pipeline Portable Crushing & Screening System, Metallic Ore Operating Scenario		
PF	1.043	Conveyor C-3 transfer of Metallic Ore to Conveyor C-4	
PF	1.044	Conveyor C-4 transfer of Metallic Ore to Radial Stacker C-5	
PF	1.045	Radial Stacker C-5 transfer of Metallic Ore to Coarse Ore Stockpile	
PF	1.046	Conveyor C-6 transfer of Metallic Ore to Conveyor C-7	
PF	1.047	Conveyor C-7 transfer of Metallic Ore to Radial Stacker C-8	
PF	1.048	Radial Stacker C-8 transfer of Metallic Ore to Crushed Ore Stockpile	

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from **PF1.043 - PF1.048** are controlled by best operating practices.

2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

#### **Emission Limits**

- a. On and after the date of startup of **PF1.043 PF1.048**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.043 PF1.048**, the following pollutants in excess of the following specified limits:
  - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.20** pounds per hour each, nor more than **0.43** tons per year each, based on a 12-month rolling period. This limit is less than the **63.00** pounds per hour for each maximum allowable emission limit as determined from NAC 445B.22033 and each maximum allowable throughput as limited in V.3.a. of this section.
  - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.43** pounds per hour each, nor more than **0.90** tons per year each, based on a 12-month rolling period.
  - (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from **PF1.043 PF1.048** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.
- b. New Source Performance Standards (NSPS) Subpart LL Standards of Performance for Metallic Mineral Processing Plants (40 CFR Part 60.380)

On and after the sixtieth day after achieving the maximum production rate at which **System 17** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Process fugitive emissions from **PF1.043**, **PF1.044**, **PF1.046**, and **PF1.047** each, will not exceed **10%** opacity (40 CFR Part 60.382(b)).
- (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- (3) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.043**, **PF1.044**, **PF1.046**, **and PF1.047** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).

## **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

- V. Emission Units PF1.043 PF1.048 (continued)
  - 3. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

**Operating Parameters** 

- a. The maximum allowable throughput rate for **PF1.043 PF1.048** each, will not exceed **300.0** tons of **as fed ore** per any one-hour period.
- b. The maximum annual throughput rate for **PF1.043 PF1.048** each, will not exceed **1,125,000.0** tons of **as fed ore** per year, based on a 12-month rolling period.
- c. Hours

PF1.043 - PF1.048 each, may operate 8,760 hours per calendar year.

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of as fed ore for **PF1.043 PF1.048** each, on a daily basis.
- (2) Monitor and record the hours of operation for **PF1.043 PF1.048** each, on a daily basis.
- (3) Monitor and record the throughput rate of as fed ore for **PF1.043 PF1.048** each, on a cumulative monthly basis, for each 12-month rolling period.
- (4) Conduct and record a visible emissions test on **PF1.043 PF1.048** each, in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **PF1.043 PF1.048** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (5) The required monitoring established in (1) through (4) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.043 PF1.048** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of as fed ore, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of as fed ore, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of as fed ore, for each 12-month rolling period.
  - (f) The results of each visible emissions tests and any corrective action taken.
- b. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b))
  The permittee, upon issuance date of this permit, shall:
  - (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

Shielded Requirements

## **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

W. Emission Units PF1.043A – PF1.048A Location North 4,453.91 km, East 524.12 km, UTM (Zone 11, NAD 83)

Syst	System 17A – Pipeline Portable Crushing & Screening System, Aggregate Operating Scenario		
PF	1.043A	Conveyor C-3 transfer of Aggregate to Conveyor C-4	
PF	1.044A	Conveyor C-4 transfer of Aggregate to Radial Stacker C-5	
PF	1.045A	Radial Stacker C-5 transfer of Aggregate to Coarse Aggregate Stockpile	
PF	1.046A	Conveyor C-6 transfer of Aggregate to Conveyor C-7	
PF	1.047A	Conveyor C-7 transfer of Aggregate to Radial Stacker C-8	
PF	1.048A	Radial Stacker C-8 transfer of Aggregate to Crushed Aggregate Stockpile	

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from **PF1.043A - PF1.048A** are controlled by best operating practices.

2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits

- a. On and after the date of startup of **PF1.043A PF1.048A**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.043A PF1.048A**, the following pollutants in excess of the following specified limits:
  - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.20** pounds per hour each, nor more than **0.43** tons per year each, based on a 12-month rolling period. This limit is less than the **63.00** pounds per hour for each maximum allowable emission limit as determined from NAC 445B.22033 and each maximum allowable throughput as limited in W.3.a. of this section.
  - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.43** pounds per hour each, nor more than **0.90** tons per year each, based on a 12-month rolling period.
  - (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from **PF1.043A PF1.048A** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.
- b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)

On and after the sixtieth day after achieving the maximum production rate at which **System 17A** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Process fugitive emissions from **PF1.043A**, **PF1.044A**, **PF1.046A**, and **PF1.047A** each, will not exceed **15%** opacity (40 CFR Part 60.672(c)).
- (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- (3) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.043A**, **PF1.044A**, **PF1.046A**, and **PF1.047A** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).

### BUREAU OF AIR POLLUTION CONTROL

## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

- W. Emission Units PF1.043A PF1.048A (continued)
  - 3. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Operating Parameters
    - a. The maximum allowable throughput rate for **PF1.043A PF1.048A** each, will not exceed **300.0** tons of **aggregate** per any one-hour period.
    - b. The maximum annual throughput rate for **PF1.043A PF1.048A** each, will not exceed **1,125,000.0** tons of **aggregate** per year, based on a 12-month rolling period.
    - c. Hours

PF1.043A - PF1.048A each, may operate 8,760 hours per calendar year.

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of aggregate for **PF1.043A PF1.048A** each, on a daily basis.
- (2) Monitor and record the hours of operation for **PF1.043A PF1.048A** each, on a daily basis.
- (3) Monitor and record the throughput rate of aggregate for **PF1.043A PF1.048A** each, on a cumulative monthly basis, for each 12-month rolling period.
- (4) Conduct and record a visible emissions test on **PF1.043A PF1.048A** each, in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **PF1.043A PF1.048A** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (5) The required monitoring established in (1) through (4) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.043A PF1.048A** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of aggregate, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of aggregate, for each 12-month rolling period.
  - (f) The results of each visible emissions tests and any corrective action taken.
- b. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b)) The permittee, upon issuance date of this permit, shall:
  - (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

Shielded Requirements

### BUREAU OF AIR POLLUTION CONTROL

## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

X. Emission Units S2.019 & PF1.049 - PF1.054 Location North 4,444.70 km, East 532.81 km, UTM (Zone 11, NAD 83)

Syst	System 18 – A28 Heap Leach Lime Silo		
S	2.019	A28 Heap Leach Lime Silo pneumatic or A28 Bucket Elevator loading	
PF	1.049	A28 Lime Silo Reclaim transfer to A28 Conveyor #2	
PF	1.050	A28 Conveyor #2 transfer to A28 Weigh Hopper	
PF	1.051	A28 Weigh Hopper transfer to Truck	
PF	1.052	A28 Truck Dump transfer to A28 Truck Dump Pocket	
PF	1.053	A28 Truck Dump Pocket transfer to A28 Conveyor #1	
PF	1.054	A28 Conveyor #1 transfer to A28 Bucket Elevator	

#### 1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from **S2.019** shall be ducted to a control system consisting of a **bin vent** with 100% capture.

Emissions from PF1.049 and PF1.050 shall be controlled by a full enclosure that completely encloses this transfer point.

Emissions from PF1.051 shall be controlled by a shroud (enclosure) that partially encloses this transfer point.

Emissions from PF1.052 and PF1.053 shall be controlled by an enclosure that partially encloses this transfer point.

Emissions from PF1.054 shall be controlled by a full enclosure that completely encloses this transfer point.

### 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

**Emission Limits** 

a. NAC 445B.305 *Part 70 Program* 

On and after the date of startup of **S2.019**, Permittee will not discharge or cause the discharge into the atmosphere from the bin vent of **S2.019**, the following pollutants in excess of the following specified limits:

- (1) The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.034** pounds per hour, nor more than **0.013** tons per year, based on a 12-month rolling period. This limit is less than the **51.28** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited in X.3.a. of this section.
- (2) The discharge of PM (particulate matter) to the atmosphere will not exceed **0.099** pounds per hour, nor more than **0.038** tons per year, based on a 12-month rolling period.
- (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from the **bin vent discharge of S2.019** will not equal or exceed **20%** in accordance with NAC 445B.22017.

#### b. NAC 445B.305 Part 70 Program

On and after the date of startup of **PF1.049 – PF1.050**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.049 – PF1.050**, the following pollutants in excess of the following specified limits:

- (1) The discharge of PM<sub>10</sub> to the atmosphere will not exceed **0.00** pounds per hour each, nor more than **0.00** tons per year each, based on a 12-month rolling period. This limit is less than the **39.96** pounds per hour maximum allowable emission limit for **PF1.049 PF1.050** each, as determined from NAC 445B.22033 and each maximum allowable throughput as limited in X.3.c. of this section.
- (2) The discharge of PM to the atmosphere will not exceed **0.00** pounds per hour each, nor more than **0.00** tons per year each, based on a 12-month rolling period.
- (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from **PF1.049 PF1.050** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.

## **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

- X. Emission Units S2.019 and PF1.049 PF1.054 (continued)
  - 2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
    - c. NAC 445B.305 *Part 70 Program* (continued)

On and after the date of startup of **PF1.051**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.051**, the following pollutants in excess of the following specified limits:

- (1) The discharge of PM<sub>10</sub> to the atmosphere will not exceed **0.036** pounds per hour, nor more than **0.046** tons per year, based on a 12-month rolling period. This limit is less than the **39.96** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited in X.3.c. of this section
- (2) The discharge of PM to the atmosphere will not exceed **0.077** pounds per hour, nor more than **0.098** tons per year, based on a 12-month rolling period.
- (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from **PF1.051** will not equal or exceed **20%** in accordance with NAC 445B.22017.
- d. NAC 445B.305 Part 70 Program

On and after the date of startup of **PF1.052** – **PF1.053**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.052** – **PF1.053**, the following pollutants in excess of the following specified limits:

- (1) The discharge of  $PM_{10}$  to the atmosphere will not exceed **0.12** pounds per hour each, nor more than **0.046** tons per year each, based on a 12-month rolling period. This limit is less than the **51.28** pounds per hour maximum allowable emission limit for **PF1.052 PF1.053** each, as determined from NAC 445B.22033 and each maximum allowable throughput as limited in X.3.d. of this section.
- (2) The discharge of PM to the atmosphere will not exceed **0.26** pounds per hour each, nor more than **0.098** tons per year each, based on a 12-month rolling period.
- (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from **PF1.052 PF1.053** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.

### e. NAC 445B.305 *Part 70 Program*

On and after the date of startup of **PF1.054**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.054**, the following pollutants in excess of the following specified limits:

- (1) The discharge of  $PM_{10}$  to the atmosphere will not exceed **0.00** pounds per hour, nor more than **0.00** tons per year, based on a 12-month rolling period. This limit is less than the **51.28** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited in X.3.d. of this section.
- (2) The discharge of PM to the atmosphere will not exceed **0.00** pounds per hour, nor more than **0.00** tons per year, based on a 12-month rolling period.
- (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from **PF1.054** will not equal or exceed **20%** in accordance with NAC 445B.22017.

## 3. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

#### **Operating Parameters**

- a. The maximum allowable loading rate for **S2.019** will not exceed **100.0** tons of **lime** per any one-hour period.
- b. The maximum annual loading rate for **S2.019** will not exceed **77,000.00** tons of **lime** per year, based on a 12-month rolling period.
- c. The maximum allowable discharge rate for **PF1.049 PF1.051** each, will not exceed **30.0** tons of **lime** per any one-hour period.
- d. The maximum allowable discharge rate for PF1.052 PF1.054 each, will not exceed 100.0 tons of lime per any one-hour period.
- e. The maximum annual discharge rate for **PF1.049 PF1.054** each, will not exceed **77,000.0** tons of **lime** per year, based on a 12-month rolling period.
- f. Hours
  - (1) **S2.019 and PF1.049 PF1.054** each, may operate **8,760** hours per calendar year.

## **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

- X. Emission Units S2.019 and PF1.049 PF1.054 (continued)
  - 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
    - a. Monitoring, Record keeping and Compliance
      - The Permittee, upon issuance of this operating permit will:
      - (1) Monitor and record the loading rate of lime for **S2.019** on a daily basis.
      - (2) Monitor and record the discharge rate of lime for **PF1.049 PF1.054** each, on a daily basis.
      - (3) Monitor and record the hours of operation of S2.019 and PF1.049 PF1.054 each, on a daily basis.
      - (4) Conduct a monthly inspection of the **bin vent on S2.019** in accordance with the manufacturer's operation and maintenance manual and record the results (e.g. the condition of the filter fabric) and any corrective actions taken.
      - (5) Conduct a monthly inspection of the enclosures on PF1.049 PF1.054 each, and record the results and any corrective action taken.
      - (6) Conduct and record a visible emissions test on the **bin vent of S2.019 and enclosures of PF1.049 PF1.054** in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a monthly basis for any month or a portion thereof that **S2.019 and PF1.049 PF1.054** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
      - (7) The required monitoring established in (1) through (6) above will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.019 and PF1.049 PF1.054** is operating:
        - (a) The calendar date of any required monitoring.
        - (b) The total daily loading rate of lime, in tons, for the corresponding date.
        - (c) The total daily discharge rate of lime, in tons, for the corresponding date.
        - (d) The total daily loading hours of operation for the corresponding date.
        - (e) The total daily discharge hours of operation for the corresponding date.
        - (f) The corresponding average hourly loading rate of lime, in tons per hour. The average hourly loading rate will be determined from the daily loading rate and the total daily hours of operation recorded in (b) and (d) above.
        - (g) The cumulative monthly loading rate of lime, for each 12-month rolling period.
        - (h) The corresponding average hourly discharge rate of lime, in tons per hour. The average hourly discharge rate will be determined from the daily discharge rate and the total daily hours of operation recorded in (c) and (e) above.
        - (i) The cumulative monthly discharge rate of lime, for each 12-month rolling period.
        - (j) Results and verification of the monthly inspections on the bin vent for S2.019 and enclosures for PF1.049 PF1.054 each, and any corrective actions taken in order to maintain implementation and proper use of the bin vent and enclosures used for control of emissions.
        - (k) The results of each visible emissions tests and any corrective action taken.
  - NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>

     No Shielded Requirements



## **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001 Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## Section VI. Specific Operating Conditions (continued)

#### Emission Units \$2.020 & PF1.052 - PF1.054

System 18A – Pipeline A28 Heap Leach Lime Silo, Alternate Loading Scenario to System 18 - REMOVE			
PF	1.052	A28 Truck Dump transfer to A28 Truck Dump Pocket	
PF	1.053	A28 Truck Dump Pocket transfer to A28 Conveyor #1	
PF	1.054	A28 Conveyor #1transfer to A28 Bucket Elevator	
S	2.020	A28 Bucket Elevator transfer to A28 Heap Leach Lime Silo	

March 11, 2009 - Consolidated into System 18.



## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions (continued)**

#### Z. Emission Units \$2.021 & PF1.055 - PF1.060

Location 1 (Cortez Hills) North 4,444.62 km, East 533.58 km, UTM (Zone 11,NAD 83) Location 2 (A30) North 4,454.28 km, East 523.57 km, UTM (Zone 11,NAD 83)

Syst	System 19 – A30 Heap Leach Lime Silo		
S	2.021	A30 Heap Leach Lime Silo pneumatic or A30 Bucket Elevator loading	
PF	1.055	A30 Lime Silo Reclaim transfer to A30 Conveyor #2	
PF	1.056	A30 Conveyor #2 transfer to A30 Weigh Hopper	
PF	1.057	A30 Weigh Hopper transfer to Truck	
PF	1.058	A30 Truck Dump transfer to A30 Truck Dump Pocket	
PF	1.059	A30 Truck Dump Pocket transfer to A30 Conveyor #1	
PF	1.060	A30 Conveyor #1 transfer to A30 Bucket Elevator	

#### 1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

#### Air Pollution Control Equipment

Emissions from **S2.021** shall be ducted to a control system consisting of a **bin vent** with 100% capture.

Emissions from PF1.055 and PF1.056 shall be controlled by a full enclosure that completely encloses this transfer point.

Emissions from **PF1.057** shall be controlled by a **shroud (enclosure)** that partially encloses this transfer point.

Emissions from PF1.058 and PF1.059 shall be controlled by an enclosure that partially encloses this transfer point.

Emissions from PF1.060 shall be controlled by a full enclosure that completely encloses this transfer point.

#### NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits

#### a. NAC 445B.305 Part 70 Program

On and after the date of startup of **S2.021**, Permittee will not discharge or cause the discharge into the atmosphere from the bin vent of **S2.021**, the following pollutants in excess of the following specified limits:

- (1) The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.034** pounds per hour, nor more than **0.013** tons per year, based on a 12-month rolling period. This limit is less than the **51.28** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited in Z.3.a. of this section.
- (2) The discharge of PM (particulate matter) to the atmosphere will not exceed **0.099** pounds per hour, nor more than **0.038** tons per year, based on a 12-month rolling period.
- (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from the **bin vent discharge of S2.021** will not equal or exceed **20%** in accordance with NAC 445B.22017.

#### b. NAC 445B.305 Part 70 Program

On and after the date of startup of **PF1.055** – **PF1.056**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.055** – **PF1.056**, the following pollutants in excess of the following specified limits:

- (1) The discharge of PM<sub>10</sub> to the atmosphere will not exceed **0.00** pounds per hour each, nor more than **0.00** tons per year each, based on a 12-month rolling period. This limit is less than the **39.96** pounds per hour maximum allowable emission limit for **PF1.055 PF1.056** each, as determined from NAC 445B.22033 and each maximum allowable throughput as limited in Z.3.c. of this section.
- (2) The discharge of PM to the atmosphere will not exceed **0.00** pounds per hour each, nor more than **0.00** tons per year each, based on a 12-month rolling period.
- (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from **PF1.055 PF1.056** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.



## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

- Z. Emission Units S2.021 and PF1.055 PF1.060 (continued)
  - 2. NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - c. NAC 445B.305 Part 70 Program (continued)

On and after the date of startup of **PF1.057**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.057**, the following pollutants in excess of the following specified limits:

- (1) The discharge of PM<sub>10</sub> to the atmosphere will not exceed **0.036** pounds per hour, nor more than **0.046** tons per year, based on a 12-month rolling period. This limit is less than the **39.96** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited in Z.3.c. of this section.
- (2) The discharge of PM to the atmosphere will not exceed **0.077** pounds per hour, nor more than **0.098** tons per year, based on a 12-month rolling period.
- (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from **PF1.057** will not equal or exceed **20%** in accordance with NAC 445B.22017.
- d. NAC 445B.305 Part 70 Program

On and after the date of startup of **PF1.058** – **PF1.059**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.058** – **PF1.059**, the following pollutants in excess of the following specified limits:

- (1) The discharge of  $PM_{10}$  to the atmosphere will not exceed **0.12** pounds per hour each, nor more than **0.046** tons per year each, based on a 12-month rolling period. This limit is less than the **51.28** pounds per hour maximum allowable emission limit for **PF1.058 PF1.059** each, as determined from NAC 445B.22033 and each maximum allowable throughput as limited in Z.3.d. of this section.
- (2) The discharge of PM to the atmosphere will not exceed **0.26** pounds per hour each, nor more than **0.098** tons per year each, based on a 12-month rolling period.
- (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from **PF1.058 PF1.059** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.
- e. NAC 445B.305 *Part 70 Program*

On and after the date of startup of **PF1.060**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.060**, the following pollutants in excess of the following specified limits:

- (1) The discharge of PM<sub>10</sub> to the atmosphere will not exceed **0.00** pounds per hour, nor more than **0.00** tons per year, based on a 12-month rolling period. This limit is less than the **51.28** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited in Z.3.d. of this section.
- (2) The discharge of PM to the atmosphere will not exceed **0.00** pounds per hour, nor more than **0.00** tons per year, based on a 12-month rolling period.
- (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from **PF1.060** will not equal or exceed **20%** in accordance with NAC 445B.22017.
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

**Operating Parameters** 

- a. The maximum allowable loading rate for **S2.021** will not exceed **100.0** tons of **lime** per any one-hour period.
- b. The maximum annual loading rate for **S2.021** will not exceed **77,000.00** tons of **lime** per year, based on a 12-month rolling period.
- c. The maximum allowable discharge rate for **PF1.055 PF1.057** each, will not exceed **30.0** tons of **lime** per any one-hour period.
- d. The maximum allowable discharge rate for **PF1.058 PF1.060** each, will not exceed **100.0** tons of **lime** per any one-hour period.
- e. The maximum annual discharge rate for **PF1.055 PF1.060** each, will not exceed **77,000.0** tons of **lime** per year, based on a 12-month rolling period.
- f. Hours
  - (1) **S2.021 and PF1.055 PF1.060** each, may operate **8,760** hours per calendar year.

## **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

- Emission Units S2.021 and PF1.055 PF1.060 (continued)
  - NAC 445B.3405 (NAC 445B.316) Part 70 Program
    - Monitoring, Record keeping and Compliance
      - The Permittee, upon issuance of this operating permit will:
      - (1) Monitor and record the loading rate of lime for **S2.021** on a daily basis.
      - (2) Monitor and record the discharge rate of lime for PF1.055 PF1.060 each, on a daily basis.
      - (3) Monitor and record the hours of operation of **S2.021 and PF1.055 PF1.060** each, on a daily basis.
      - (4) Conduct a monthly inspection of the bin vent on S2.021 in accordance with the manufacturer's operation and maintenance manual and record the results (e.g. the condition of the filter fabric) and any corrective actions taken.
      - (5) Conduct a monthly inspection of the **enclosures on PF1.055 PF1.060** each, and record the results and any corrective action taken.
      - (6) Conduct and record a visible emissions test on the bin vent of S2.021 and enclosures of PF1.055 PF1.060 in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a monthly basis for any month or a portion thereof that S2.021 and PF1.055 - PF1.060 each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60,
      - (7) The required monitoring established in (1) through (6) above will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that S2.021 and PF1.055 – **PF1.060** is operating:
        - The calendar date of any required monitoring.
        - The total daily loading rate of lime, in tons, for the corresponding date. (b)
        - The total daily discharge rate of lime, in tons, for the corresponding date.
        - The total daily loading hours of operation for the corresponding date.
        - (e) The total daily discharge hours of operation for the corresponding date.
        - The corresponding average hourly loading rate of lime, in tons per hour. The average hourly loading rate will be determined from the daily loading rate and the total daily hours of operation recorded in (b) and (d) above.
        - The cumulative monthly loading rate of lime, for each 12-month rolling period.
        - The corresponding average hourly discharge rate of lime, in tons per hour. The average hourly discharge rate will be determined from the daily discharge rate and the total daily hours of operation recorded in (c) and (e) above.
        - The cumulative monthly discharge rate of lime, for each 12-month rolling period.
        - Results and verification of the monthly inspections on the bin vent for S2.021 and enclosures for PF1.055 **PF1.060** each, and any corrective actions taken in order to maintain implementation and proper use of the **bin** vent and enclosures used for control of emissions.
        - The results of each visible emissions tests and any corrective action taken.
  - NAC 445B.3405 (NAC 445B.316) Part 70 Program 5. Shielded Requirements



## **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001 Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## Section VI. Specific Operating Conditions (continued)

#### AA. Emission Units \$2.022 & PF1.058 - PF1.060

Syst	System 19A – Pipeline A30 Heap Leach Lime Silo, Alternate Loading Scenario to System 19 - REMOVE			
PF	1.058	A30 Truck Dump transfer to A30 Truck Dump Pocket		
PF	1.059	A30 Truck Dump Pocket transfer to A30 Conveyor #1		
PF	1.060	A30 Conveyor #1 transfer to A30 Bucket Elevator		
S	2.022	A30 Bucket Elevator transfer to A30 Heap Leach Lime Silo		

March 11, 2009 - Consolidated into System 19.



## **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001 Permit No. AP1041-2141 CLASS I AIR QUALITY OPERATING PERMIT

## SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

AB. Emission Units S2.023 and PF1.061 - System Removed 04-03-2012

Sys	System 20 – Gold Acres 20 Ton Lime Silo		
S	2.023	Gold Acres Lime Silo pneumatic loading	
PF	1.061	Gold Acres Lime Silo unloading to Truck	

AC. Emission Units PF1.062 - PF1.071 - System Removed 04-03-2012

Syst	System 21 – Cortez Mill Primary Metallic Ore Crushing System		
PF	1.062	Loader transfer of Metallic Ore to 50 Ton Ore Bin	
PF	1.063	50 Ton Ore Bin transfer of Metallic Ore to Hydrastoke Feeder	
PF	1.064	Hydrastoke Feeder transfer of Metallic Ore to Jaw Crusher	
PF	1.065	Jaw Crusher (mfd by BLH, mdl# 42"x48', s/n 424808)	
PF	1.066	Jaw Crusher transfer of Metallic Ore to Conveyor #1	
PF	1.067	Conveyor #1 transfer of Metallic Ore to Conveyor #2	
PF	1.068	Conveyor #2 transfer of Metallic Ore to Vibrating Screen	
PF	1.069	Vibrating Screen	
PF	1.070	Vibrating Screen transfer of oversize Metallic Ore to Cone Crusher	
PF	1.071	Vibrating Screen transfer of undersize Metallic Ore to Conveyor #3A	

AD. Emission Units PF1.072 - PF1.073 - System Removed 04-03-2012

Syst	System 22 – Cortez Mill Secondary Metallic Ore Crushing System		
PF	1.072	Cone Crusher	
PF	1.073	Cone Crusher transfer of Metallic Ore to Conveyor #1	

**AE.** Emission Units PF1.074 – PF1.077 – System Removed 04-03-2012

Syst	System 23 – Cortez Mill Metallic Ore Transfers			
PF	1.074	Conveyor #3a transfer of Metallic Ore to Conveyor #3		
PF	1.075	Conveyor #3 transfer of Metallic Ore to Crushed CIL Ore Stockpile		
PF	1.076	Crushed CIL Ore Stockpile transfer of Metallic Ore to Conveyor #4A		
PF	1.077	Conveyor #4A transfer of Metallic Ore to Conveyor #4B		

AF. Emission Units PF1.077A - PF1.079 – System Removed 04-03-2012

Syst	System 23A – Cortez Mill Metallic Ore Transfers, Alternate Operating Scenario to System 23			
PF	1.078	Loader transfer of Metallic Ore to 20 Ton Ore Bin		
PF	1.079	20 Ton Ore Bin transfer of Metallic Ore to Conveyor #4A		
PF	1.077A	Conveyor #4A transfer of Metallic Ore to Conveyor #4B		

AG. Emission Unit PF1.080 - System Removed 04-03-2012

Sys	System 24 – Cortez Mill Metallic Ore Transfer	
PF	1.080	Conveyor #4B transfer of Metallic Ore to Rod Mill

AH. Emission Units S2.024 & PF1.081-PF1.082 - System Removed 04-03-2012

Syst	System 25 – Cortez Mill CIP Lime Silo		
S	2.024	CIP Lime Silo pneumatic loading	
PF	1.081	CIP Lime Silo unloading to Lime Grinding Mill via enclosed Screw Conveyor	
PF	1.082	Lime Grinding Mill transfer to Rod Mill	

## **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001 Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

Al. Emission Units PF1.083 - PF1.086 - System Removed 04-03-2012

Syst	System 26 – Cortez Mill Wet Crushing & Screening System		
PF	1.083	Rod Mill and transfer of Metallic Ore to Cyclones	
PF	1.084	Cyclones and Metallic Ore transfer to Ball Mill (oversize) and Vibrating Screens (undersize)	
PF	1.085	Vibrating Screens and Metallic Ore transfer to Ball Mill (oversize) or Surge Tank (undersize)	
PF	1.086	Ball Mill and Metallic Ore transfer to Cyclones	

AJ. Emission Units S2.025 and PF1.087 – System Removed 04-03-2012

Sys	System 27 – Cortez Mill 100 Ton Leach Lime Silo		
S	2.025	Leach Lime Silo pneumatic loading	
PF	1.087	Leach Lime Silo unloading to Truck	

AK. Emission Units S2.026 & PF1.088 – PF1.089 – System Removed 04-03-2012

Syst	System 28 – Cortez Underground Shotcrete Plant – Cement Transfers		
S	2.026	Shotcrete Cement Silo pneumatic loading	
PF	1.088	Shotcrete Cement Silo unloading to Cement Hopper	
PF	1.089	Cement Hopper auger transfer to Mix Hopper	

AL. Emission Units PF1.090 - PF1.091 - System Removed 04-03-2012

Sys	System 29 – Cortez Underground Shotcrete Plant – Aggregate Transfers			
PF	1.090	Loader transfer of Aggregate to Aggregate Bin		
PF	1.091	Aggregate Bin auger transfer to Mix Hopper		

AM. Emission Units S2.027 and PF1.092 - System Removed 04-03-2012

Sys	System 30 – Cortez Hills 100 Ton Leach Lime Silo		
S	2.027	Leach Lime Silo pneumatic loading	
PF	1.092	Leach Lime Silo unloading to Truck	

## **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

**AN. Emission Units S2.028 – S2.033** Location North 4,447.28 km, East 532.86 km, UTM (Zone 11, NAD 83)

Sys	System 31 – Cortez Hills Metallic Ore Crushing System		
S	2.028	Loader transfer of Metallic Ore to Jaw Crusher Dump Pocket	
S	2.029	Jaw Crusher Dump Pocket transfer of Metallic Ore to Jaw Crusher	
S	2.030	Jaw Crusher	
S	2.031	Jaw Crusher transfer of Metallic Ore to Surge Pocket/Apron Feeder	
S	2.032	Apron Feeder transfer of Metallic Ore to Discharge Conveyor #1	
S	2.033	Discharge Conveyor #1 transfer of Metallic Ore to Discharge Conveyor #2	

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from **S2.028** – **S2.033** shall be controlled by a **baghouse** with 100% capture and a maximum volume flow rate of 40,000 dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

Stack height – 50 feet

Stack inside diameter – 3.67 feet

Stack temperature – ambient

- 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
  - a. On and after the date of startup of **S2.028 S2.033**, Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of the baghouse the following pollutants in excess of the following specified limits:
    - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **6.86** pounds per hour combined, nor more than **30.03** tons per year combined, based on a 12-month rolling period. This limit is less than the **483.06** pounds per hour maximum allowable emission limit for **System 31** as determined from NAC 445B.22033 and the combined maximum allowable throughput rates as limited in AN.3.a of this section.
    - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **6.86** pounds per hour combined, nor more than **30.03** tons per year combined, based on a 12-month rolling period.
    - (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from the **baghouse that controls S2.028 S2.033** will not equal or exceed **20%** in accordance with NAC 445B.22017.
  - b. New Source Performance Standards (NSPS) Subpart LL Standards of Performance for Metallic Mineral Processing Plants (40 CFR Part 60.380)

On and after the sixtieth day after achieving the maximum production rate at which **System 31** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Emissions of particulate matter in excess of 0.05 gram per dry standard cubic meter. (40 CFR Part 60.382(a)(1))
- (2) Emissions that exhibit greater than **7 percent opacity**. (40 CFR Part 60.382(a)(2))
- (3) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction. (40 CFR Part 60.11(c))
- (4) At all times, including periods of startup, shutdown, and malfunction, Permittee shall, to the extent practicable, maintain and operate **S2.028 S2.033** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR Part 60.11(d))



## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

### AN. Emission Units S2.028 - S2.033 (continued)

3. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

Operating Parameters

- a. The maximum allowable throughput rate for **S2.028 S2.033** each, will not exceed **1,250.0** tons of **as fed ore** per any one-hour period.
- b. The maximum annual throughput rate for **S2.028 S2.033** each, will not exceed **5,475,000.0** tons of **as fed ore** per year, based on a 12-month rolling period.
- c. Hours

S2.028 - S2.033 each, may operate a total of 8,760 hours per calendar year.

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of as fed ore for S2.028 S2.033 each, on a daily basis.
- (2) Monitor and record the hours of operation for **S2.028 S2.033** each, on a daily basis.
- (3) Monitor and record the throughput rate of as fed ore for **S2.028 S2.033** each, on a cumulative monthly basis, for each 12-month rolling period.
- (4) Conduct and record a visible emissions test on the **exhaust stack of the baghouse** in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **S2.028 S2.033** is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (5) Conduct and record a weekly reading of differential pressure on the **baghouse**, and verify that it is within the range established by the manufacturer; record the time of the reading and the differential pressure. **S2.018a S2.018f** each, will not be operated when the baghouse differential pressure falls outside the range established in the operation and maintenance guidelines. The permittee will install and operate an alarm system for the **baghouse**. The alarm system will activate when the differential pressure falls outside the range set by the manufacturer. The permittee will record the time of the alarm and the time the equipment was shut down.
- (6) Monitor and record that the maintenance and operation of the **baghouse** (e.g. condition of the filter fabric) is in accordance with the manufacturer's operation and maintenance guidelines, on a weekly basis. Weekly records must show that observations were made, and records of any corrective actions taken.
- (7) The required monitoring established in (1) through (6) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.028 S2.033** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of as fed ore, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of as fed ore, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of as fed ore, for each 12-month rolling period.
  - (f) The results of each visible emissions tests and any corrective action taken.
  - (g) The results of the weekly differential pressure readings for the **baghouse**.
  - (h) Date and time of any activations of the differential pressure alarm system for the **baghouse**, and any repairs and/or corrective actions taken to correct the problem.
  - (i) Results and verification of the weekly maintenance and operation of the **baghouse** and any corrective actions taken in order to maintain implementation and proper use of the **baghouse** used for control of emissions.

### BUREAU OF AIR POLLUTION CONTROL

## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

AN. Emission Units S2.028 - S2.033 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* (continued)
  - b. <u>Performance/Compliance Testing</u>

Within 180 days from the date of expiration of this permit, but no earlier than 365 days from the date of expiration of this permit, the permittee will:

- (1) Conduct and record the following performance tests on the exhaust stack of the **baghouse** consisting of three valid runs at the maximum throughput rate subject to AN.3.a. of this section.
  - (a) A Method 201A and Method 202 test in accordance with 40 CFR Part 51, Appendix M (or an alternative EPA reference method approved by the director) for PM<sub>10</sub>.
  - (b) A Method 5 test with back-half catch in accordance with 40 CFR Part 60, Appendix A (or an alternative EPA reference method approved by the director) for PM.
- (2) The Method 201A and Method 202 tests required in AN.4.b.(1)(a) of this section may be replaced by a Method 5 test which includes the back-half catch. All particulate captured in the Method 5 tests with back-half performed under this provision shall be considered  $PM_{10}$  emissions for determination of compliance with the emission limitations established in AN.2 of this section.
- (3) Performance tests required under AN.4.b(1) of this section that are conducted below the maximum allowable throughput, as established in AN.3.a. of this section, shall be subject to the director's review to determine if the throughput during the performance tests were sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration then the director may order additional performance testing for the purpose of a compliance demonstration.
- (4) Conduct and record a Method 9 visible emissions reading on the exhaust stack of the **baghouse** concurrent with one of the three required Method 5 or Method 201A and Method 202 performance tests. Visible emissions reading shall use the procedures contained in 40 CFR Part 60, Appendix A, Method 9. The visible emissions reading must be conducted by a certified visible emissions reader for a period of 6-minutes. The opacity readings must be averaged such that compliance with a 6-minute average is determined.
- (5) Tests of performance and visible emissions readings must be conducted under such conditions as the director specifies to the permittee based on representative performance of the affected facility. The permittee shall make available to the director such records as may be necessary to determine the conditions of the tests of performance and visible emissions readings. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of tests of performance and visible emissions readings unless otherwise specified in the application standard (NAC 445B.252.3).
- (6) The permittee shall give notice to the director 30 days before the tests of performance and visible emissions readings to allow the director to have an observer present. A written testing procedure for the tests of performance and visible emissions reading must be submitted to the director at least 30 days before the tests of performance and visible emissions readings to allow the director to review the proposed testing procedures (NAC.445B.252.4).
- c. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b)) The permittee, upon issuance date of this permit, shall:
  - (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>
  <u>Shielded Requirements</u>
  No Shielded Requirements



## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

AO. Emission Unit S2.034	Location North 4,447.32 km, East 532.87 km, UTM (Zone 11, NAD 83)
Emission Unit S2.035	Location North 4,456.73 km, East 526.48 km, UTM (Zone 11, NAD 83)
Emission Unit S2.036	Location North 4,455.66 km, East 525.10 km, UTM (Zone 11, NAD 83)
Emission Unit S2.037	Location North 4,456.33 km, East 524.80 km, UTM (Zone 11, NAD 83)
Emission Unit S2.038	Location North 4.456.74 km. East 524.08 km. UTM (Zone 11, NAD 83)

Sys	System 32 – Cortez Hills Metallic Ore Overland Conveying System		
S	2.034	Discharge Conveyor #2 transfer of Metallic Ore to Overland Conveyor #1	
S	2.035	Overland Conveyor #1 transfer of Metallic Ore to Overland Conveyor #2	
S	2.036	Overland Conveyor #2 transfer of Metallic Ore to Overland Conveyor #3	
S	2.037	Overland Conveyor #3 transfer of Metallic Ore to Overland Conveyor #4	
S	2.038	Overland Conveyor #4 transfer of Metallic Ore to Stacker Conveyor (Conveyor #2 in System 2)	

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from **S2.034** – **S2.038** each, are controlled by a **dust collector** with 100% capture and a maximum volume flow rate of 1,511 dry standard cubic feet per minute (dscfm).

2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits

- a. On and after the date of startup of \$2.034 \$2.038, the permittee will not discharge or cause the discharge into the atmosphere from the dust collectors that control \$2.034 \$2.038, the following pollutants in excess of the following specified limits:
  - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.26** pounds per hour each, nor more than **1.14** tons per year each, based on a 12-month rolling period. This limit is less than the **80.51** pounds per hour maximum allowable emission limit for **S2.034 S2.038** each, as determined from NAC 445B.22033 and the maximum allowable throughputs as limited in AO.3.a of this section.
  - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.26** pounds per hour each, nor more than **1.14** tons per year each, based on a 12-month rolling period.
  - (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from **S2.034 S2.038** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.
- b. New Source Performance Standards (NSPS) Subpart LL Standards of Performance for Metallic Mineral Processing Plants (40 CFR Part 60.380)

On and after the sixtieth day after achieving the maximum production rate at which **System 32** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Emissions of particulate matter in excess of 0.05 gram per dry standard cubic meter. (40 CFR Part 60.382(a)(1))
- (2) Emissions that exhibit greater than **7 percent opacity**. (40 CFR Part 60.382(a)(2))
- (3) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction. (40 CFR Part 60.11(c))
- (4) At all times, including periods of startup, shutdown, and malfunction, Permittee shall, to the extent practicable, maintain and operate **S2.034 S2.038** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR Part 60.11(d))

### **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

AO. Emission Units S2.034 - S2.038 (continued)

3. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Operating Parameters

- a. The maximum allowable throughput rate for \$2.034 \$2.038 each, will not exceed 1,250.0 tons of as fed ore per any one-hour period.
- b. The maximum annual throughput rate for **S2.034 S2.038** each, will not exceed **5,475,000.0** tons of **as fed ore** per year, based on a 12-month rolling period.
- c. Hours

S2.034 – S2.038 each, may operate a total of 8,760 hours per calendar year.

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of as fed ore for S2.034 S2.038 each, on a daily basis.
- (2) Monitor and record the hours of operation for **S2.034 S2.038** each, on a daily basis.
- (3) Monitor and record the throughput rate of as fed ore for **S2.034 S2.038** each, on a cumulative monthly basis, for each 12-month rolling period.
- (4) Conduct and record a visible emissions test on **each dust collector exhaust stack that controls S2.034 S2.038**, in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **S2.034 S2.038** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (5) Monitor and record that the maintenance and operation of **each dust collector exhaust stack that controls S2.034 S2.038** (e.g. condition of the filter fabric) is in accordance with the manufacturer's operation and maintenance guidelines, on a weekly basis. Weekly records must show that observations were made, and records of any corrective actions taken.
- (6) The required monitoring established in (1) through (5) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.034 S2.038** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of as fed ore, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of as fed ore, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of as fed ore, for each 12-month rolling period.
  - (f) The results of each visible emissions tests and any corrective action taken.
  - (g) Results and verification of the weekly maintenance and operation of each dust collector and any corrective actions taken in order to maintain implementation and proper use of each dust collector used for control of emissions.
- b. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b))

The permittee, upon issuance date of this permit, shall:

- (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) Part 70 Program

**Shielded Requirements** 

### BUREAU OF AIR POLLUTION CONTROL

## Facility ID No. A0001

## Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

AP. Emission Unit S2.034A Location North 4,447.32 km, East 532.87 km, UTM (Zone 11, NAD 83) Location North 4,449.05 km, East 531.23 km, UTM (Zone 11, NAD 83)

Sys	System 32A – Cortez Hills Metallic Ore Overland Conveying System, Alt Operating Scenario to System 32		
S	2.034A	Discharge Conveyor #2 transfer of Metallic Ore to Overland Conveyor #1	
PF	1.093	Overland Conveyor #1 transfer of Metallic Ore to Metallic Ore Bypass Stockpile	

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from **S2.034A** are controlled by a **dust collector** with 100% capture and a maximum volume flow rate of 1,511 dry standard cubic feet per minute (dscfm).

Emissions from PF1.093 are controlled by best operating practices.

- 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
  - a. On and after the date of startup of **S2.034A**, the permittee will not discharge or cause the discharge into the atmosphere from the dust collectors that control **S2.034A**, the following pollutants in excess of the following specified limits:
    - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.26** pounds per hour, nor more than **1.14** tons per year, based on a 12-month rolling period. This limit is less than the **80.51** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited in AP.3.a. of this section.
    - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.26** pounds per hour, nor more than **1.14** tons per year, based on a 12-month rolling period.
    - (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from **S2.034A** will not equal or exceed **20%** in accordance with NAC 445B.22017.
  - b. On and after the date of startup of **PF1.093**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.093**, the following pollutants in excess of the following specified limits:
    - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **1.23** pounds per hour, nor more than **2.69** tons per year, based on a 12-month rolling period. This limit is less than the **80.51** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited in AP.3.a. of this section.
    - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **2.60** pounds per hour, nor more than **5.69** tons per year, based on a 12-month rolling period.
    - (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from **PF1.093** will not equal or exceed **20%** in accordance with NAC 445B.22017.
  - c. New Source Performance Standards (NSPS) Subpart LL Standards of Performance for Metallic Mineral Processing Plants (40 CFR Part 60.380)

On and after the sixtieth day after achieving the maximum production rate at which **S2.034A** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Emissions of particulate matter in excess of 0.05 gram per dry standard cubic meter. (40 CFR Part 60.382(a)(1))
- (2) Emissions that exhibit greater than **7 percent opacity**. (40 CFR Part 60.382(a)(2))
- (3) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction. (40 CFR Part 60.11(c))
- (4) At all times, including periods of startup, shutdown, and malfunction, Permittee shall, to the extent practicable, maintain and operate **S2.034A** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR Part 60.11(d))



## Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

#### AP. Emission Units S2.034A & PF1.093 (continued)

- 3. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Operating Parameters
  - a. The maximum allowable throughput rate for **S2.034A** and **PF1.093** each, will not exceed **1,250.0** tons of **as fed ore** per any one-hour period.
  - b. The maximum annual throughput rate for **S2.034A** and **PF1.093** each, will not exceed **5,475,000.0** tons of **as fed ore** per year, based on a 12-month rolling period.
  - c. Hours

S2.034A and PF1.093 each, may operate a total of 8,760 hours per calendar year.

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of as fed ore for S2.034A and PF1.093 each, on a daily basis.
- (2) Monitor and record the hours of operation for **S2.034A and PF1.093** each, on a daily basis.
- (3) Monitor and record the throughput rate of as fed ore for **S2.034A and PF1.093** each, on a cumulative monthly basis, for each 12-month rolling period.
- (4) Conduct and record a visible emissions test on **PF1.093** and the dust collector exhaust stack that controls **S2.034A** in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **S.034A** and **PF1.093** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (5) Monitor and record that the maintenance and operation of the **dust collector exhaust stack that controls S2.034A** (e.g. condition of the filter fabric) is in accordance with the manufacturer's operation and maintenance guidelines, on a weekly basis. Weekly records must show that observations were made, and records of any corrective actions taken.
- (6) Conduct and record a weekly visible emission inspection on **PF1.093** each; record the time of the survey and indicate whether any visible emissions that are not normal for the process, were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.



# Facility ID No. A0001 Permit No. AP1041-2141 CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## Section VI. Specific Operating Conditions (continued)

### AP. Emission Units S2.034A & PF1.093 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* (continued)
  - a. <u>Monitoring, Record keeping and Compliance</u> (continued)
    - (7) The required monitoring established in (1) through (6) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.034A and PF1.093** each, are operating:
      - (a) The calendar date of any required monitoring.
      - (b) The total daily throughput rate of as fed ore, in tons, for the corresponding date.
      - (c) The total daily hours of operation for the corresponding date.
      - (d) The corresponding average hourly throughput rate of as fed ore, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
      - (e) The cumulative monthly throughput rate of as fed ore, for each 12-month rolling period.
      - (f) The results of each visible emissions tests and any corrective action taken.
      - (g) Results and verification of the weekly maintenance and operation for the **dust collector that controls S2.034A** and any corrective actions taken in order to maintain implementation and proper use of the **dust collector** used for control of emissions.
  - b. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b)) The permittee, upon issuance date of this permit, shall:
    - (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>
   No Shielded Requirements



### BUREAU OF AIR POLLUTION CONTROL

## Facility ID No. A0001 Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

AQ. Emission Units PF1.094 - PF1.096 - System Removed 04-03-2012

Syst	System 33 – Cortez Underground Backfill Plant – Aggregate Transfers		
PF	1.094	Loader transfer of Aggregate to Feed Conveyor with Hopper	
PF	1.095	Feed Conveyor transfer of Aggregate to Conveyor	
PF	1.096	Conveyor transfer of Aggregate to Batch Mixer	

AR. Emission Units S2.039, PF1.097 - PF1.098 - System Removed 04-03-2012

Syst	System 34 – Cortez Underground Backfill Plant – Cement Transfers		
S	2.039	Cement Silo pneumatic loading	
PF	1.097	Cement Silo unloading to Cement Auger	
PF	1.098	Cement Auger transfer to Batch Mixer	

AS1. Emission Unit PF1.099 - System Removed 04-03-2012

Syst	System 35A – Cortez Hills Aggregate Crushing System – Primary Crusher Pocket		
PF	1.099	Loader transfer of Aggregate to Primary Crusher Pocket	
PF	1.100	Removed – consolidate into PF1.102	
PF	1.101	Removed	
PF	1.103	Removed – consolidate into PF1.102	

#### AS2. Emission Unit PF1.102 - System Removed 04-03-2012

System 35B – Cortez Hills Aggregate Crushing System – Primary Crusher			
PF	1.102	Primary Crusher and associated transfers in (Crusher Pocket) and out (Conveyor 1)	

#### AS3. Emission Unit PF1.135 - System Removed 04-03-2012

	System 35C – Cortez Hills Aggregate Crushing System – Primary Crusher Transfer		
PF	1.135	Conveyor 1 transfer of Aggregate to Conveyor 2	

AT1. Emission Unit PF1.105 – System Removed 04-03-2012

Syst	System 36A – Cortez Hills Aggregate Crushing System – Primary Screen		
PF	1.104	Removed – consolidate into PF1.105	
PF	1.105	Primary Screen and associated transfers in (Conveyor 2) and out (Conveyor 3, Conveyor 6, Conveyor 13)	
PF	1.106	Removed – consolidate into PF1.105	
PF	1.107	Removed – consolidate into PF1.105	

#### AT2. Emission Unit PF1.136 – System Removed 04-03-2012

Syst	System 36B – Cortez Hills Aggregate Crushing System – Secondary Screen			
PF	1.136	Secondary Screen and associated transfers in (Conveyor 5) and out (Conveyor 3, Conveyor 6)		

#### AU1.Emission Unit PF1.109 - System Removed 04-03-2012

Syst	System 37A – Cortez Hills Aggregate Crushing System – Cone Crusher		
PF	1.108	Removed – consolidate into PF1.109	
PF	1.109	Cone Crusher and associated transfers in (Conveyor 3) and out (Conveyor 4)	
PF	1.110	Removed – consolidate into PF1.109	

#### AU2.Emission Units PF1.137 - System Removed 04-03-2012

System 37B – Cortez Hills Aggregate Crushing System – Cone Crusher Transfer		
PF	1.137	Conveyor 4 transfer of Aggregate to Conveyor 5

## **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001 Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

AV1. Emission Units PF1.111, PF1.138 - PF1.144 - System Removed 04-03-2012

System 38A – Cortez Hills Aggregate Crushing System – Aggregate Stockpile Conveyors					
PF	1.138	Conveyor 6 transfer of Aggregate to Conveyor 7			
PF	1.139	Conveyor 7 transfer of Aggregate to Conveyor 8			
PF	1.140	Conveyor 8 transfer of Aggregate to Conveyor 9			
PF	1.141	Conveyor 9 transfer of Aggregate to Conveyor 10			
PF	1.142	Conveyor 10 transfer of Aggregate to Conveyor 11			
PF	1.143	Conveyor 11 transfer of Aggregate to Conveyor 12			
PF	1.144	Conveyor 12 transfer of Aggregate to Stacker Conveyor 1			
PF	1.111	Stacker Conveyor 1 transfer of Aggregate to Aggregate Stockpile			

#### **AV2. Emission Units PF1.145 – PF1.146 – System Removed 04-03-2012**

System 38B – Cortez Hills Aggregate Crushing System – Reject Stockpile Conveyors				
PF	1.145	Conveyor 13 transfer of Aggregate to Stacker Conveyor 2		
PF	1.146	Stacker Conveyor 2 transfer of Aggregate to Reject Stockpile		

## **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

AW. Emission Units S2.040 - S2.041 Location North 4.450.00 km, East 532.60 km, UTM (Zone 11, NAD 83)

System 39 – Cortez Mill Soil Remediation				
S	2.040	1.5 MMBtu/hr Soil Therm Thermal/Catalytic Oxidizer Soil Vapor Extraction Unit		
S	2.041	1.5 MMBtu/hr Soil Therm Thermal/Catalytic Oxidizer Soil Vapor Extraction Unit		

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from **S2.040 - S2.041** shall be controlled by a **Thermal/Catalytic Oxidizer**.

2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 

#### **Emission Limits**

On and after the date of startup of **S2.040 - S2.041**, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stacks of **S2.040 - S2.041**, the following pollutants in excess of the following specified limits:

- a. NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.030** pound per hour, nor more than **0.13** ton per year, each.
- b. NAC 445B.305 <u>Part 70 Program</u> The discharge of  $PM_{10}$  (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.030** pound per hour, nor more than **0.13** ton per year, each.
- c. NAC 445B.305 <u>Part 70 Program</u> The discharge of SO<sub>2</sub> (sulfur dioxide) to the atmosphere will not exceed **0.085** pound per hour, nor more than **0.37** ton per year, each.
- d. NAC 445B.305  $\underline{Part\ 70\ Program}$  The discharge of NO<sub>x</sub> (nitrogen oxides) to the atmosphere will not exceed **0.46** pounds per hour, nor more than **2.03** tons per year, each.
- e. NAC 445B.305 <u>Part 70 Program</u> The discharge of CO (carbon monoxide) to the atmosphere will not exceed **0.089** pounds per hour, nor more than **0.39** ton per year, each.
- f. NAC 445B.305 <u>Part 70 Program</u> The discharge of VOC (volatile organic compounds) to the atmosphere will not exceed **0.009** pound per hour, nor more than **0.039** ton per year, each.
- g. NAC 445B.22047 (*Federally Enforceable SIP Requirement*) The maximum allowable discharge of sulfur to the atmosphere will not exceed **2.18** pounds per hour, each.
- h. NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from each exhaust stack of **S2.040 S2.041** will not equal or exceed **20%**.

### 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. S2.040 S2.041 shall treat only petroleum contaminant vapors at the remediation site
- b. **S2.040 S2.041** shall operate at all times that petroleum contaminant vapors are being extracted from the ground.
- c. The maximum allowable heat input rate for **S2.040 S2.041** each, will not exceed **1.5** MMBtu per any one-hour period, combusting a maximum of **16.57** gallons per hour of propane to fuel the Thermal/Catalytic Oxidizer Burner.
- d. **S2.040 S2.041** shall be operated in accordance with the manufacturer's specifications designed to achieve a petroleum hydrocarbon destruction efficiency of greater than or equal to **95%**.
- e. **S2.040 S2.041** shall have sampling ports where inlet (influent) and outlet (effluent) gas samples can be collected without dilution from outside air.
- f. Connecting apparatus between the well head and the SVE units (**S2.040 S2.041**) should be sealed so that no discharge of pollutants can occur.
- g. **S2.040 S2.041** shall have a device installed and maintained to measure and display the total system volumetric flow rate.

# BUREAU OF AIR POLLUTION CONTROL

# Facility ID No. A0001

# Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

#### AW. Emission Units S2.040 - S2.041 (continued)

3. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* (continued)

#### **Operating Parameters**

- h. A temperature recording device shall be installed and maintained to measure and record the process temperature of the Thermal/Catalytic Oxidizer for **S2.040 S2.041**.
- i. The process temperature when the thermal oxidizer mode for **S2.040 S2.041** is operated shall be equal to or greater than 1400°F, or maintained at a temperature such that a petroleum vapor destruction efficiency of greater than or equal to 95% is achieved.
- j. The process temperature when the catalytic oxidizer mode for **S2.040 S2.041** is operated shall be equal to or greater than 600°F, or maintained at a temperature such that a petroleum vapor destruction efficiency of greater than or equal to 95% is achieved.
- k. Hours
  - **S2.040 S2.041** each, may operate a total of 8,760 hours per calendar year.
- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance
    - The Permittee, upon issuance of this operating permit will:
    - (1) Monitor and record the VOC Inlet and Outlet Concentrations in the SVE system.
      - (a) VOC Inlet gases shall be sampled at a point before the gases enter the Thermal/Catalytic Oxidizer.
      - (b) VOC Outlet gases shall be sampled at the exhaust stack of the Thermal/Catalytic Oxidizer.
      - (c) Permittee shall take representative grab samples every month of the remediation activity.
      - (d) Permittee shall determine the concentrations of VOC in the inlet and outlet gas samples by using appropriate EPA-approved reference methods for petroleum hydrocarbon-range organic compounds.
    - (2) Monitor and record the mode of VOC destruction (Thermal or Catalytic).
    - (3) Monitor and record the hours of operation for emission unit **S2.040 S2.041** on a daily basis.
    - (4) Monitor and record the operating temperature of the SVE Thermal/Catalytic Oxidizer, in degrees Fahrenheit (°F) when VOC sampling is done.
    - (5) Monitor and record the volumetric flow rate of the SVE Thermal/Catalytic Oxidizer when VOC samples are taken.
    - (6) Monitor and record the propane fuel consumption on a daily basis.
    - (7) The required monitoring and recordkeeping established in (1) through (6) above will be maintained in a contemporaneous log containing the following information:
      - (a) The calendar date of any required monitoring or sampling.
      - (b) The operating mode of the SVE system (Thermal or Catalytic).
      - (c) The operating temperature of the SVE Thermal/Catalytic Oxidizer.
      - (d) The total daily hours of operation.
      - (e) The total daily propane fuel consumption.
      - (f) Concentration of VOC in the inlet gas sample (ppm by volume).
      - (g) Concentration of VOC in the outlet gas sample (ppm by volume).
      - (h) Amount of petroleum hydrocarbon recovered (gallons), based on VOC concentrations.
      - (i) The VOC destruction efficiency for the SVE system calculated from gas sample analyses.
      - (j) Total system volumetric flow rate in cubic feet per minute (cfm).



# Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

### **Section VI. Specific Operating Conditions (continued)**

AX. Emission Unit PF1.112 Location North 4,449.98 km, East 532.58 km, UTM (Zone 11, NAD 83)

System 40 - Cortez Mill Groundwater Remediation

PF | 1.112 | Shallow Tray Groundwater Air Stripper, 50 GPM Water Flow

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

PF1.112 shall have no add-on controls.

2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 

#### **Emission Limits**

On and after the date of startup of **PF1.112**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.112**, the following pollutants in excess of the following specified limits:

- a. NAC 445B.305 <u>Part 70 Program</u> The discharge of VOC (volatile organic compounds) to the atmosphere will not exceed **1.43** pound per hour, nor more than **6.26** ton per year.
- b. NAC 445B.305 <u>Part 70 Program</u> The discharge of combined HAP (hazardous air pollutants, consisting of BTEX and MTBE) to the atmosphere will not exceed **0.60** pound per hour, nor more than **2.66** ton per year.
- c. NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from **PF1.112** will not equal or exceed 20%.

### 3. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

#### **Operating Parameters**

- a. **PF1.112** shall treat only petroleum contaminated groundwater at the remediation site.
- b. **PF1.112** shall operate at all times that petroleum contaminant vapors are being extracted from the groundwater.
- c. The maximum allowable groundwater that will be treated will not exceed 50 gallons per minute.
- d. **PF1.112** shall be operated in accordance with the manufacturer's specifications.
- e. **PF1.112** shall have sampling ports where inlet (influent) and outlet (effluent) groundwater samples can be collected.
- f. **PF1.112** shall have a device installed and maintained to measure and display the total system volumetric flow rate.
- g. Hours

**PF1.112** may operate a total of 8,760 hours per calendar year.

- 4. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the VOC and HAP (BTEX and MTBE) Inlet and Outlet Concentrations in the Air Stripper.
  - (a) VOC and HAP Inlet samples shall be taken at a point before the groundwater enters the Air Stripper.
  - (b) VOC and HAP Outlet samples shall be taken at a point after the groundwater passes through the Air Stripper.
  - (c) Permittee shall take representative water samples every month of the remediation activity.
  - (d) Permittee shall determine the concentrations of VOC and HAP in the inlet and outlet samples by using appropriate EPA reference methods for petroleum hydrocarbon-range organic compounds in aqueous samples.
- (2) Monitor and record the hours of operation for emission unit **PF1.112** on a daily basis.
- (3) Monitor and record the volumetric flow rate of the Air Stripper when VOC/HAP samples are taken.
- (4) The required monitoring and recordkeeping established in (1) through (3) above will be maintained in a contemporaneous log containing the following information:
  - (a) The calendar date of any required monitoring or sampling.
  - (b) The total daily hours of operation.
  - (c) Concentration of VOC and HAP (BTEX and MTBE) in the inlet water samples (ppm by volume).
  - (d) Concentration of VOC and HAP (BTEX and MTBE) in the outlet water samples (ppm by volume).
  - (e) Amount of petroleum hydrocarbon recovered (gallons), based on VOC concentrations.
  - (f) Total system volumetric flow rate in gallons per minute during the sampling period.



# Facility ID No. A0001

### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

AY1.Emission Units PF1.113 - PF1.124 Location North 4,448.63 km, East 532.17 km, UTM (Zone 11, NAD 83)

Syst	system 41A – Cortez Hills Main Batch Plant – Aggregate Transfers	
PF	1.113	Loading of Aggregate to Coarse Aggregate Bin
PF	1.114	Coarse Aggregate Bin discharge to Coarse Aggregate Conveyor
PF	1.115	Coarse Aggregate Conveyor transfer to Aggregate Weigh Hopper Feed Conveyor
PF	1.116	Loading of Aggregate to Fine Aggregate Bin
PF	1.117	Fine Aggregate Bin discharge to Fine Aggregate Conveyor
PF	1.118	Fine Aggregate Conveyor transfer to Aggregate Weigh Hopper Feed Conveyor
PF	1.119	Loading of Aggregate to Shotcrete Aggregate Bin
PF	1.120	Shotcrete Aggregate Bin discharge to Shotcrete Aggregate Conveyor
PF	1.121	Shotcrete Aggregate Conveyor transfer to Aggregate Weigh Hopper Feed Conveyor
PF	1.122	Aggregate Weigh Hopper Feed Conveyor transfer to Aggregate Weigh Hopper
PF	1.123	Aggregate Weigh Hopper discharge to Mixer Feed Conveyor
PF	1.124	Mixer Feed Conveyor transfer of Aggregate to Mixer

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from **PF1.113 - PF1.124** each, are controlled by an **enclosure**.

2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 

**Emission Limits** 

a. NAC 445B.305 Part 70 Program

On and after the date of startup of **PF1.113**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.113**, the following pollutants in excess of the following specified limits:

- (1) The discharge of  $PM_{10}$  to the atmosphere will not exceed **0.13** pound per hour, nor more than **0.086** tons per year, based on a 12-month rolling period. This limit is less than the **70.10** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited in AY.3.a. of this section.
- (2) The discharge of PM to the atmosphere will not exceed **0.27** pound per hour, nor more than **0.18** tons per year, based on a 12-month rolling period.
- (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from **PF1.113** will not equal or exceed **20%** in accordance with NAC 445B.22017.
- b. NAC 445B.305 *Part 70 Program*

On and after the date of startup of **PF1.114** – **PF1.124**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.114** – **PF1.124**, the following pollutants in excess of the following specified limits:

- (1) The discharge of PM<sub>10</sub> to the atmosphere will not exceed **0.092** pound per hour each, nor more than **0.086** tons per year each, based on a 12-month rolling period. This limit is less than the **66.31** pounds per hour maximum allowable emission limit for **PF1.114 PF1.124** each, as determined from NAC 445B.22033 and each maximum allowable throughput as limited in AY.3.b. of this section.
- (2) The discharge of PM to the atmosphere will not exceed **0.20** pound per hour each, nor more than **0.18** tons per year each, based on a 12-month rolling period.
- (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from **PF1.114 PF1.124** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.



# Facility ID No. A0001

### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

### **Section VI. Specific Operating Conditions** (continued)

AY1. Emission Units PF1.113 – PF1.124 (continued)

3. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* Operating Parameters

- a. The maximum allowable throughput rate for **PF1.113** will not exceed **550.0** tons of **aggregate** per any one-hour period.
- b. The maximum allowable throughput rate for **PF1.114 PF1.124** each, will not exceed **400.0** tons of **aggregate** per any one-hour period.
- c. The maximum annual throughput rate for **PF1.113 PF1.124** each, will not exceed **750,000.0** tons of **aggregate** per year, based on a 12-month rolling period.
- d. Hours

PF1.113 – PF1.124 each, may operate 24 hours per day and 8,760 hours per calendar year.

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of aggregate for **PF1.113 PF1.124** each, on a daily basis.
- (2) Monitor and record the hours of operation of **PF1.113 PF1.124** each, on a daily basis.
- (3) Conduct a monthly inspection on the **enclosures on PF1.113 PF1.124** and record the results and any corrective action taken.
- (4) Conduct and record a visible emissions test on the **enclosures of PF1.113 PF1.124**, in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a monthly basis for any month or a portion thereof that **PF1.113 PF1.124** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (5) The required monitoring established in (1) through (4) above will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.113 PF1.124** is operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of aggregate, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of aggregate, for each 12-month rolling period.
  - (f) Results and verification of the monthly inspections on the enclosures for PF1.113 PF1.124 each, and any corrective actions taken in order to maintain implementation and proper use of the enclosures for PF1.113 PF1.124 used for control of emissions.
  - (g) The results of each visible emissions tests and any corrective action taken.
- 5. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

**Shielded Requirements** 

No Shielded Requirements

### BUREAU OF AIR POLLUTION CONTROL

# Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

### **Section VI. Specific Operating Conditions (continued)**

AY2. Emission Unit S2.046 Location North 4,448.63 km, East 532.17 km, UTM (Zone 11, NAD 83)

System 41B – Cortez Hills Main Batch Plant – Aggregate Heater

S 2.046 5.4 MMBtu/hr Propane-Fired Aggregate Heater (mfd by American Geothermal, mdl# D30)

### 1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### Air Pollution Control Equipment

**S2.046** shall be used to heat and prevent freezing of the material contained in the coarse aggregate bin, fine aggregate bin and shotcrete aggregate bin permitted in System 41A. Emissions from **S2.046** shall be ducted with the heated air to the bins and shall be controlled in a manner which minimizes emissions.

#### 2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

#### **Emission Limits**

On and after the date of startup of **S2.046**, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stream of **S2.046**, the following pollutants in excess of the following specified limits:

- a. NAC 445B.2203 (<u>Federally Enforceable SIP Requirement</u>) The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.60** pound per million Btu.
- b. NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter) to the atmosphere will not exceed **0.041** pound per hour, nor more than **0.13** ton per year, based on a 12-month rolling period.
- c. NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.041** pound per hour, nor more than **0.13** ton per year, based on a 12-month rolling period.
- d. NAC 445B.305 <u>Part 70 Program</u> The discharge of SO<sub>2</sub> (sulfur dioxide) to the atmosphere will not exceed **0.087** pound per hour, nor more than **0.27** ton per year, based on a 12-month rolling period.
- e. NAC 445B.305 <u>Part 70 Program</u> The discharge of NO<sub>x</sub> (nitrogen oxides) to the atmosphere will not exceed **0.77** pound per hour, nor more than **2.35** tons per year, based on a 12-month rolling period.
- f. NAC 445B.305 <u>Part 70 Program</u> The discharge of CO (carbon monoxide) to the atmosphere will not exceed **0.44** pound per hour, nor more than **1.36** tons per year, based on a 12-month rolling period.
- g. NAC 445B.305 <u>Part 70 Program</u> The discharge of VOC (volatile organic compounds) to the atmosphere will not exceed **0.047** pound per hour, nor more than **0.14** ton per year, based on a 12-month rolling period.
- h. NAC 445B.22047 (*Federally Enforceable SIP Requirement*) The maximum allowable discharge of sulfur to the atmosphere will not exceed **3.78** pounds per hour.
- i. NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from the exhaust stream of **S2.046** will not equal or exceed **20%** in accordance with NAC 445B.22017.

#### 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. **S2.046** will combust propane as the primary fuel and will not exceed **59.0** gallons of propane combusted per hour, nor more than 362,000 gallons of propane combusted per year, based on a 12-month rolling period.
- b. The maximum operating heat input for **S2.046** while combusting propane will not exceed **5.4** million Btu per any one-hour period (MMBTU/hr).
- c. Hours
  - S2.046 may operate 8,760 hours per year.



### **BUREAU OF AIR POLLUTION CONTROL**

# Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

AY2. Emission Unit S2.046 (continued)

- 4. NAC 445B.3405 (NAC 445B.316); NAC 445B.252 *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the propane consumption rate for **S2.046** on a daily basis.
- (2) Monitor and record the hours of operation for **S2.046** on a daily basis.
- (3) Install, calibrate, operate, and maintain a device for the measurement of the propane combustion rate for **S2.046**.
- (4) Conduct and record a visible emissions test on the **exhaust stream of S2.046** in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **S2.046** is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (5) The required monitoring established in (1) through (4) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.046** is operating.
  - (a) The calendar date of any required monitoring.
  - (b) The total daily hours of operation for the corresponding date.
  - (c) The total daily fuel consumption rate of propane, in gallons, for the corresponding date.
  - (d) The corresponding average hourly fuel consumption rate of propane, in gallons per hour. The average hourly fuel consumption rate will be determined from the daily fuel consumption rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly fuel consumption rate of propane, for each 12-month rolling period.
  - (f) The results of each visible emissions tests and any corrective action taken.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>
  <u>Shielded Requirements</u>
  No Shielded Requirements



## Facility ID No. A0001

### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

#### AZ. Emission Units S2.042 - S2.043, PF1.125 - PF1.126

Location North 4,448.69 km, East 532.14 km, UTM (Zone 11, NAD 83)

Syst	System 42 – Cortez Hills Main Batch Plant – Silo Transfers	
S	2.042	Loading of Cement, Fly Ash, and/or Shotcrete to Silo #1
PF	1.125	Silo #1 unloading to Cement Batcher #1
S	2.043	Loading of Cement, Fly Ash, and/or Shotcrete to Silo #2
PF	1.126	Silo #2 unloading to Cement Batcher #2

#### 1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from **S2.042** – **S2.043** each, shall be ducted to a control system consisting of a **bin vent** with 100% capture. Emissions from **PF1.125** – **PF1.126** each, are controlled by an **enclosure**.

### 2. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Emission Limits**

#### a. NAC 445B.305 <u>Part 70 Program</u>

On and after the date of startup of S2.042 - S2.043, Permittee will not discharge or cause the discharge into the atmosphere from the bin vents of S2.042 - S2.043, the following pollutants in excess of the following specified limits:

- (1) The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.051** pound per hour each, nor more than **0.034** tons per year each, based on a 12-month rolling period. This limit is less than the **55.44** pounds per hour maximum allowable emission limit for **S2.042 S2.043** each, as determined from NAC 445B.22033 and each maximum allowable throughput as limited in AZ.3.a. of this section.
- (2) The discharge of PM (particulate matter) to the atmosphere will not exceed **0.15** pound per hour each, nor more than **0.099** tons per year each, based on a 12-month rolling period.
- (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from the **bin vent discharges of S2.042 S2.043** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.

#### b. NAC 445B.305 Part 70 Program

On and after the date of startup of **PF1.125** – **PF1.126**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.125** – **PF1.126**, the following pollutants in excess of the following specified limits:

- (1) The discharge of PM<sub>10</sub> to the atmosphere will not exceed **0.38** pound per hour each, nor more than **0.48** tons per year each, based on a 12-month rolling period. This limit is less than the **49.06** pounds per hour maximum allowable emission limit for **PF1.125 PF1.126** each, as determined from NAC 445B.22033 and each maximum allowable throughput as limited in AZ.3.b. of this section.
- (2) The discharge of PM to the atmosphere will not exceed **1.38** pound per hour each, nor more than **1.73** tons per year each, based on a 12-month rolling period.
- (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from **PF1.125 PF1.126** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.

### 3. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

#### **Operating Parameters**

- a. The maximum allowable loading rate for S2.042 S2.043 each, will not exceed 150.0 tons of cement, fly ash, and/or shotcrete per any one-hour period.
- b. The maximum allowable discharge rate for PF1.125 PF1.126 each, will not exceed 80.0 tons of cement, fly ash, and/or shotcrete per any one-hour period.
- c. The maximum annual discharge rate for S2.042 S2.043 and PF1.125 PF1.126 each, will not exceed 200,000.0 tons of cement, fly ash, and/or shotcrete per year, based on a 12-month rolling period.
- d. Hours
  - (1) **S2.042 S2.043** and **PF1.125 PF1.126** each, may operate **24** hours per day and **8,760** hours per calendar year.

### **BUREAU OF AIR POLLUTION CONTROL**

# Facility ID No. A0001

### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

AZ. Emission Units S2.042 - S2.043 and PF1.125 - PF1.126 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the loading rate of cement, fly ash, and/or shotcrete for **S2.042 S2.043 and PF1.125 PF1.126** on a daily basis.
- (2) Monitor and record the discharge rate of cement, fly ash, and/or shotcrete for S2.042 S2.043 and PF1.125 PF1.126 on a daily basis.
- (3) Monitor and record the hours of operation of S2.042 S2.043 and PF1.125 PF1.126 on a daily basis.
- (4) Conduct a monthly inspection of the **bin vents on S2.042 S2.043** in accordance with the manufacturer's operation and maintenance manual and record the results (e.g. the condition of the filter fabric) and any corrective actions taken.
- (5) Conduct a monthly inspection of the **enclosures on PF1.125 PF1.126** and record the results and any corrective action taken.
- (6) Conduct and record a visible emissions test on the **bin vents of S2.042 S2.043 and enclosures for PF1.125 PF1.126** each, in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a monthly basis for any month or a portion thereof that **S2.042 S2.043 and PF1.125 PF1.126** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (7) The required monitoring established in (1) through (6) above will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.042 S2.043 and PF1.125 PF1.126** is operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily loading rate of cement, fly ash, and/or shotcrete, in tons, for the corresponding date.
  - (c) The total daily discharge rate of cement, fly ash, and/or shotcrete, in tons, for the corresponding date.
  - (d) The total daily loading hours of operation for the corresponding date.
  - (e) The total daily discharge hours of operation for the corresponding date.
  - (f) The corresponding average hourly loading rate of cement, fly ash, and/or shotcrete, in tons per hour. The average hourly loading rate will be determined from the daily loading rate and the total daily hours of operation recorded in (b) and (d) above.
  - (g) The cumulative monthly loading rate of cement, for each 12-month rolling period.
  - (h) The corresponding average hourly discharge rate of cement, in tons per hour. The average hourly discharge rate will be determined from the daily discharge rate and the total daily hours of operation recorded in (c) and (e) above.
  - (i) The cumulative monthly discharge rate of cement, fly ash, and/or shotcrete, for each 12-month rolling period.
  - (j) Results and verification of the monthly inspections on the bin vents for S2.042 S2.043 and enclosures for PF1.125 PF1.126, and any corrective actions taken in order to maintain implementation and proper use of the bin vents and enclosure systems used for control of emissions.
  - (k) The results of each visible emissions tests and any corrective action taken.
- 5. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* Shielded Requirements

No Shielded Requirements

# **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001 Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

# **Section VI. Specific Operating Conditions** (continued)

BA. Emission Units PF1.127 - PF1.128 - System Removed 04-03-2012

Sys	System 43 – Cortez Hills Back-Up Batch Plant – Aggregate Transfers	
PF	1.127	Loading of Aggregate to Aggregate Bin
PF	1.128	Aggregate Bin discharge to Aggregate Conveyor

BB. Emission Units S2.044 - S2.045 - System Removed 04-03-2012

System 44 – Cortez Hills Back-Up Batch Plant – Silo Loading		
S	2.044	Loading of Cement, Fly Ash, and/oror Shotcrete to Silo #1
S	2.045	Loading of Cement, Fly Ash, and/or Shotcrete to Silo #2

BC. Emission Unit PF1.129 – System Removed 04-03-2012

Syst	tem 45 –	Cortez Hills Back-Up Batch Plant – Central Mixer Loading
PF	1.129	Central Mixer Loading

### BUREAU OF AIR POLLUTION CONTROL

# Facility ID No. A0001

### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

### **Section VI. Specific Operating Conditions** (continued)

BD. Emission Units PF1.130 – PF1.134 Location North 4,448.90 km, East 532.23 km, UTM (Zone 11, NAD 83)

Syst	System 46 - Cortez Hills Metal Removal Plant - Metallic Ore Transfers	
PF	1.130	Loading of Metallic Ore to Feed Hopper
PF	1.131	Feed Hopper discharge of Metallic Ore to Conveyor #1
PF	1.132	Conveyor #1 transfer of Metallic Ore to Conveyor #2
PF	1.134	Conveyor #2 transfer of Metallic Ore to Conveyor #3
PF	1.133	Conveyor #3 transfer of Metallic Ore to Metallic Ore Stockpile

#### 1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from **PF1.130 - PF1.134** are controlled by best operating practices.

### 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

### **Emission Limits**

- a. On and after the date of startup of **PF1.130 PF1.134**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.130 PF1.134**, the following pollutants in excess of the following specified limits:
  - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.36** pound per hour each, nor more than **0.53** ton per year each, based on a 12-month rolling period. This limit is less than the **67.70** pounds per hour maximum allowable emission limit for **PF1.130 PF1.134** each, as determined from NAC 445B.22033 and each maximum allowable throughput as limited in BD.3.a. of this section.
  - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.75** pound per hour each, nor more than **1.13** tons per year each, based on a 12-month rolling period.
  - (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from **PF1.130 PF1.134** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.
- b. New Source Performance Standards (NSPS) Subpart LL Standards of Performance for Metallic Mineral Processing Plants (40 CFR Part 60.380)

On and after the sixtieth day after achieving the maximum production rate at which **PF1.130 - PF1.134** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Process fugitive emissions from **PF1.130 PF1.134** each, will not exceed **10%** opacity (40 CFR Part 60.382(b)).
- (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- (3) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.130 PF1.134** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).

#### 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. The maximum allowable throughput rate for **PF1.130 PF1.134** each, will not exceed **450.0** tons of **as fed ore** per any one-hour period.
- b. The maximum annual throughput rate for **PF1.130 PF1.134** each, will not exceed **1,350,000.0** tons of **as fed ore** per year, based on a 12-month rolling period.
- c. Hours

PF1.130 - PF1.134 each, may operate a total of 8,760 hours per calendar year.



# Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

BD. Emission Units PF1.130 - PF1.134 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of as fed ore for **PF1.130 PF1.134** each, on a daily basis.
- (2) Monitor and record the hours of operation for **PF1.130 PF1.134** each, on a daily basis.
- (3) Monitor and record the throughput rate of as fed ore for **PF1.130 PF1.134** each, on a cumulative monthly basis, for each 12-month rolling period.
- (4) Conduct and record a visible emissions test on **PF1.130 PF1.134** each, in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **PF1.130 PF1.134** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (5) The required monitoring established in (1) through (4) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.130 PF1.134** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of as fed ore, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of as fed ore, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of as fed ore, for each 12-month rolling period.
  - (f) The results of each visible emissions tests and any corrective action taken.
- b. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b)) The permittee, upon issuance date of this permit, shall:
  - (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u> No Shielded Requirements

# **BUREAU OF AIR POLLUTION CONTROL**

# Facility ID No. A0001 Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

BE. Emission Unit S2.047 - S2.048 - System Removed April 8, 2013 (classified as trivial activities)

	System 47 – Cortez Hills Underground Mine Shaft Heaters		
S	2.047	8.0 MMBtu/hr Propane-Fired Shaft Heater #1 (mfd by Hartzell, mdl# G752)	
S	2.048	8.0 MMBtu/hr Propane-Fired Shaft Heater #2 (mfd by Hartzell, mdl# G752)	



# Facility ID No. A0001

### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

BF1. Emission Units PF1.147 - PF1.148 Location North 4.448.90 km, East 532.23 km, UTM (Zone 11, NAD 83)

_	System 48A – Cortez Hills Metal Removal Plant - Metallic Ore Transfers		
	PF	1.147	Metal Removal Plant Conveyor #2 transfer of Ore to Sample Conveyor S1
Ī	PF	1.148	Primary Crusher and associated transfers in (Sample Conveyor S1) and out (Sample Conveyor S2)

1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 

Air Pollution Control Equipment

Emissions from **PF1.147 - PF1.148** each, are controlled by an enclosure.

2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 

#### **Emission Limits**

- a. On and after the date of startup of **PF1.147 PF1.148**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.147 PF1.148**, the following pollutants in excess of the following specified limits:
  - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.38** pound per hour combined, nor more than **0.12** ton per year combined, based on a 12-month rolling period. This limit is less than the **25.16** pounds per hour maximum allowable emission limit for **PF1.147 PF1.148** combined, as determined from NAC 445B.22033 and the maximum allowable throughput as limited in BF1.3.a. of this section.
  - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **3.75** pounds per hour combined, nor more than **1.25** tons per year combined, based on a 12-month rolling period.
  - (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from **PF1.147 PF1.148** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.
- b. New Source Performance Standards (NSPS) Subpart LL Standards of Performance for Metallic Mineral Processing Plants (40 CFR Part 60.380)

On and after the sixtieth day after achieving the maximum production rate at which **PF1.147 - PF1.148** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Process fugitive emissions from **PF1.147 PF1.148** each, will not exceed **10%** opacity (40 CFR Part 60.382(b)).
- (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- (3) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.147 PF1.148** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

### **Operating Parameters**

- a. The maximum allowable throughput rate for **PF1.147 PF1.148** each, will not exceed **15.0** tons of **as fed ore** per any one-hour period.
- b. The maximum annual throughput rate for **PF1.147 PF1.148** each, will not exceed **10,000.0** tons of **as fed ore** per year, based on a 12-month rolling period.
- c. Hours

**PF1.147 - PF1.148** each, may operate a total of **8,760** hours per calendar year.



# Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

BF1. Emission Units PF1.147 - PF1.148 (continued)

4.

- NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of as fed ore for **PF1.147 PF1.148** each, on a daily basis.
- (2) Monitor and record the hours of operation for **PF1.147 PF1.148** each, on a daily basis.
- (3) Monitor and record the throughput rate of as fed ore for **PF1.147 PF1.148** each, on a cumulative monthly basis, for each 12-month rolling period.
- (4) Conduct and record a visible emissions test on **the enclosures of PF1.147 PF1.148** in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **PF1.147 PF1.148** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (5) The required monitoring established in (1) through (4) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.147 PF1.148** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of as fed ore, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of as fed ore, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of as fed ore, for each 12-month rolling period.
  - (f) The results of each visible emissions tests and any corrective action taken.
- b. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b)) The permittee, upon issuance date of this permit, shall:
  - (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>

   No Shielded Requirements

### **BUREAU OF AIR POLLUTION CONTROL**

# Facility ID No. A0001

### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

BF2. Emission Units PF1.149 - PF1.150 Location North 4,448.90 km, East 532.23 km, UTM (Zone 11, NAD 83)

Sys	System 48B – Cortez Hills Metal Removal Plant - Metallic Ore Transfers	
PF	1.149	Secondary Crusher & associated transfers in (Sample Conveyor S2) and out (Sample Conveyor S3)
PF	1.150	Sample Conveyor S3 transfer of Ore to Metal Removal Plant Conveyor #2 and Secondary Diverter

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from **PF1.149 - PF1.150** each, are controlled by an enclosure.

2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 

#### **Emission Limits**

- a. On and after the date of startup of **PF1.149 PF1.150**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.149 PF1.150**, the following pollutants in excess of the following specified limits:
  - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **1.20** pounds per hour combined, nor more than **0.40** ton per year combined, based on a 12-month rolling period. This limit is less than the **25.16** pounds per hour maximum allowable emission limit for **PF1.149 PF1.150** combined, as determined from NAC 445B.22033 and the maximum allowable throughput as limited in BF2.3.a. of this section.
  - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **9.00** pounds per hour combined, nor more than **3.00** tons per year combined, based on a 12-month rolling period.
  - (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from **PF1.149 PF1.150** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.
- b. New Source Performance Standards (NSPS) Subpart LL Standards of Performance for Metallic Mineral Processing Plants (40 CFR Part 60.380)

On and after the sixtieth day after achieving the maximum production rate at which **PF1.149 - PF1.150** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Process fugitive emissions from **PF1.149 PF1.150** each, will not exceed **10%** opacity (40 CFR Part 60.382(b)).
- (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- (3) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.149 PF1.150** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

### **Operating Parameters**

- a. The maximum allowable throughput rate for **PF1.149 PF1.150** each, will not exceed **15.0** tons of **as fed ore** per any one-hour period.
- b. The maximum annual throughput rate for **PF1.149 PF1.150** each, will not exceed **10,000.0** tons of **as fed ore** per year, based on a 12-month rolling period.
- c. Hours

**PF1.149 - PF1.150** each, may operate a total of **8,760** hours per calendar year.



# Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

### **Section VI. Specific Operating Conditions** (continued)

BF2. Emission Units PF1.149 - PF1.150 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of as fed ore for **PF1.149 PF1.150** each, on a daily basis.
- (2) Monitor and record the hours of operation for **PF1.149 PF1.150** each, on a daily basis.
- (3) Monitor and record the throughput rate of as fed ore for **PF1.149 PF1.150** each, on a cumulative monthly basis, for each 12-month rolling period.
- (4) Conduct and record a visible emissions test on **the enclosures of PF1.149 PF1.150** in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **PF1.149 PF1.150** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (5) The required monitoring established in (1) through (4) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.149 PF1.150** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of as fed ore, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of as fed ore, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of as fed ore, for each 12-month rolling period.
  - (f) The results of each visible emissions tests and any corrective action taken.
- b. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b)) The permittee, upon issuance date of this permit, shall:
  - (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u> No Shielded Requirements

### **BUREAU OF AIR POLLUTION CONTROL**

# Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

**BG1.** Emission Unit **S2.049** Location North 4,457.12 km, East 524.15 km, UTM (NAD 83, Zone 11)

System 49A - Pipeline Gasoline Dispensing Station

S 2.049 Pipeline Gasoline Storage Tank, 12,000 gallon capacity

- 1. <u>Air Pollution Control Equipment</u> NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emissions from **S2.049** shall be controlled by submerged fill and best operating practices.
- 2. <u>Emission Limits</u> NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>
  On and after the date of issuance of this permit, Permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits for gasoline loading into the gasoline tank (**S2.049**):
  - a. The discharge of **VOC** to the atmosphere will not exceed no more than **2.13 tons** per year, based on a 12-month rolling period
  - b. NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from **S2.049** will not equal or exceed **20%** in accordance with NAC 445B.22017.
- 3. Operating Parameters NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. The maximum gasoline loading into storage tanks \$2.049 will not exceed 37,500 gallons per calendar month.
  - b. Permittee will submit notification and supporting information of identification prior to any proposed removal, replacement, or new construction of any gasoline storage tank(s) utilized for dispensing of gasoline. The notification and identification will consist of, at a minimum, the tank location, capacity in gallons, and serial and/or identification number.
  - c. **S2.049** may operate **8,760** hours per calendar year.
- 4. <u>Monitoring, Recordkeeping, Reporting, and Compliance</u> NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> (continued) Permittee, upon the issuance date of this permit, will:
  - a. Record in a contemporaneous log the total gasoline loaded into, or dispensed from, **S2.049** as measured by individual fuel flow meters on a monthly basis.
  - b. Record in the contemporaneous log required in 4.a above, the cumulative total monthly gasoline loaded on a 12-month rolling period.
  - c. 40 CFR Part 63 Subpart CCCCCC NESHAP for Gasoline Dispensing Facilities
    Facility Requirements with Monthly Throughput of 10,000 Gallons of Gasoline or More 40 CFR 63.11117
    Permittee must comply with the following for S2.049 (40 CFR 63.11113(b)):
    - (1) Permittee must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
      - (a) Minimize gasoline spills;
      - (b) Clean up spills as expeditiously as practicable;
      - (c) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
      - (d) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
    - (2) Permittee must only load gasoline into storage tanks by utilizing submerged filling, as defined in 63.11132
    - (3) Permittee must have records available within 24 hours of a request by the Administrator to document Permittee's gasoline throughput.
    - (4) Permittee must submit the applicable notifications as required under 63.11124(a).
    - (5) Permittee must comply with the requirements of this subpart by the applicable dates specified in §63.11113.
- 5. <u>Shielded Requirements</u> NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> No shield requested.

### BUREAU OF AIR POLLUTION CONTROL

# Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

**BG2.** Emission Unit **S2.050** Location North 4,448.69 km, East 528.77 km, UTM (NAD 83, Zone 11)

System 49B - F-Canyon Gasoline Dispensing Station

- S 2.050 F-Canyon (Underground) Gasoline Storage Tank, 3,500 gallon capacity
- 1. <u>Air Pollution Control Equipment</u> NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emissions from **S2.050** shall be controlled by submerged fill and best operating practices.
- 2. <u>Emission Limits</u> NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

On and after the date of issuance of this permit, Permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits for gasoline loading into the gasoline tank (S2.050):

- a. The discharge of **VOC** to the atmosphere will not exceed no more than **0.36 ton** per year, based on a 12-month rolling period.
- b. NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from **S2.050** will not equal or exceed **20%** in accordance with NAC 445B.22017.
- 3. Operating Parameters NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. The maximum gasoline loading into storage tanks \$2.050 will not exceed 12,500 gallons per calendar month.
  - b. Permittee will submit notification and supporting information of identification prior to any proposed removal, replacement, or new construction of any gasoline storage tank(s) utilized for dispensing of gasoline. The notification and identification will consist of, at a minimum, the tank location, capacity in gallons, and serial and/or identification number.
  - c. **S2.050** may operate **8,760** hours per calendar year.
- 4. <u>Monitoring, Recordkeeping, Reporting, and Compliance</u> NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> (continued) Permittee, upon the issuance date of this permit, will:
  - a. Record in a contemporaneous log the total gasoline loaded into, or dispensed from, **S2.050** as measured by individual fuel flow meters on a monthly basis.
  - b. Record in the contemporaneous log required in 4.a above, the cumulative total monthly gasoline loaded on a 12-month rolling period.
  - c. 40 CFR Part 63 Subpart CCCCCC NESHAP for Gasoline Dispensing Facilities
    Facility Requirements with Monthly Throughput of 10,000 Gallons of Gasoline or More 40 CFR 63.11117
    Permittee must comply with the following for S2.050 (40 CFR 63.11113(b)):
    - (1) Permittee must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
      - (a) Minimize gasoline spills;
      - (b) Clean up spills as expeditiously as practicable;
      - (c) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
      - (d) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
    - (2) Permittee must only load gasoline into storage tanks by utilizing submerged filling, as defined in 63.11132
    - (3) Permittee must have records available within 24 hours of a request by the Administrator to document Permittee's gasoline throughput.
    - (4) Permittee must submit the applicable notifications as required under 63.11124(a).
    - (5) Permittee must comply with the requirements of this subpart by the applicable dates specified in §63.11113.
- 5. <u>Shielded Requirements</u> NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> No shield requested.

### **BUREAU OF AIR POLLUTION CONTROL**

# Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

**BG3.** Emission Unit S2.056 Location North 4,445.25 km, East 532.53 km, UTM (NAD 83, Zone 11)

System 49C - Cortez Hills Gasoline Dispensing Station

- S 2.056 Cortez Hills Gasoline Storage Tank, 12,000 gallon capacity
- 1. <u>Air Pollution Control Equipment</u> NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emissions from **S2.056** shall be controlled by submerged fill and best operating practices.
- 2. Emission Limits NAC 445B.3405 (NAC 445B.316) Part 70 Program

On and after the date of issuance of this permit, Permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits for gasoline loading into the gasoline tank (**S2.056**):

- a. The discharge of **VOC** to the atmosphere will not exceed no more than **2.21 tons** per year, based on a 12-month rolling period.
- b. NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from **S2.056** will not equal or exceed **20%** in accordance with NAC 445B.22017.
- 3. Operating Parameters NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. The maximum gasoline loading into storage tanks \$2.056 will not exceed 50,000 gallons per calendar month.
  - b. Permittee will submit notification and supporting information of identification prior to any proposed removal, replacement, or new construction of any gasoline storage tank(s) utilized for dispensing of gasoline. The notification and identification will consist of, at a minimum, the tank location, capacity in gallons, and serial and/or identification number.
  - c. **S2.056** may operate **8,760** hours per calendar year.
- 4. <u>Monitoring, Recordkeeping, Reporting, and Compliance</u> NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> (continued) Permittee, upon the issuance date of this permit, will:
  - a. Record in a contemporaneous log the total gasoline loaded into, or dispensed from, **S2.056** as measured by individual fuel flow meters on a monthly basis.
  - b. Record in the contemporaneous log required in 4.a above, the cumulative total monthly gasoline loaded on a 12-month rolling period.
  - c. 40 CFR Part 63 Subpart CCCCCC NESHAP for Gasoline Dispensing Facilities
    Facility Requirements with Monthly Throughput of 10,000 Gallons of Gasoline or More 40 CFR 63.11117
    Permittee must comply with the following for S2.056 (40 CFR 63.11113(b)):
    - (1) Permittee must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
      - (a) Minimize gasoline spills;
      - (b) Clean up spills as expeditiously as practicable;
      - (c) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
      - (d) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
    - (2) Permittee must only load gasoline into storage tanks by utilizing submerged filling, as defined in 63.11132
    - (3) Permittee must have records available within 24 hours of a request by the Administrator to document Permittee's gasoline throughput.
    - (4) Permittee must submit the applicable notifications as required under 63.11124(a).
    - (5) Permittee must comply with the requirements of this subpart by the applicable dates specified in §63.11113.
- 5. <u>Shielded Requirements</u> NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> No shield requested.

### **BUREAU OF AIR POLLUTION CONTROL**

# Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

### **Section VI. Specific Operating Conditions (continued)**

**BH1.Emission Unit PF1.151** Location North 4,447.28 km, East 531.60 km, UTM (Zone 11, NAD 83)

System 50A - Cortez Hills CHOP Aggregate Plant - Primary Jaw Crusher

PF | 1.151 | Primary Jaw Crusher and associated transfers in (Loader) and out (Jaw Discharge Conveyor)

1. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Air Pollution Control Equipment

Emissions from PF1.151 shall be controlled by water sprays located at PF1.151.

2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits

- a. On and after the date of startup of **PF1.151**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.151** the following pollutants in excess of the following specified limits:
  - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.22** pound per hour, nor more than **0.27** ton per year, based on a 12-month rolling period. This limit is less than the **66.31** pounds per hour maximum allowable emission limit for **PF1.151** as determined from NAC 445B.22033 and the maximum allowable throughput as limited in BH1.3.a of this section.
  - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.48** pound per hour, nor more than **0.60** ton per year, based on a 12-month rolling period.
  - (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from **PF1.151** will not equal or exceed **20%** in accordance with NAC 445B.22017.
- b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)

On and after the sixtieth day after achieving the maximum production rate at which **PF1.151** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Process fugitive emissions from **PF1.151** will not exceed **12%** opacity (40 CFR Part 60.672(b)).
- (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- (3) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.151** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

**Operating Parameters** 

- a. The maximum allowable throughput rate for **PF1.151** will not exceed **400.0** tons of **aggregate** per any one-hour period.
- b. The maximum annual throughput rate for **PF1.151** will not exceed **1,000,000.0** tons of **aggregate** per year, based on a 12-month rolling period.
- c. Hours

**PF1.151** may operate a total of **8,760** hours per year.

### **BUREAU OF AIR POLLUTION CONTROL**

# Facility ID No. A0001

### Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

**BH1.Emission Unit PF1.151 (continued)** 

- NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of aggregate for **PF1.151** on a daily basis.
- (2) Monitor and record the hours of operation for **PF1.151** on a daily basis.
- (3) Monitor and record the throughput rate of aggregate for **PF1.151** on a cumulative monthly basis, for each 12-month rolling period.
- (4) Conduct a daily observation of the water sprays and verify that they are operating normally; record the time of the observation and indicate if the water sprays are operating normally. Monitor and record that all water spray heads are operating normally. Record any water sprays that were repaired, replaced, or modified.
- (5) Conduct and record a visible emissions test on **PF1.151** in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that PF1.151 is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (6) The required monitoring established in (1) through (5) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day, that **PF1.151** is operating:
  - The calendar date of any required monitoring.
  - The total daily throughput rate of aggregate, in tons, for the corresponding date.
  - The total daily hours of operation for the corresponding date. (c)
  - The corresponding average hourly throughput rate of aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - The cumulative monthly throughput rate of aggregate, for each 12-month rolling period.
  - Results and verification of the daily observations and the implementation and proper use of the water sprays, and any corrective actions taken in order to maintain implementation and proper use of the water sprays used for control of emissions.
  - The results of each visible emissions tests and any corrective action taken.
- New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)

The permittee, upon issuance date of this permit, shall:

- (1) Inspect the water sprays on **PF1.151** during each month of operation to check that the water is flowing to discharge spray nozzles in the wet suppression system (40 CFR Part 60.674(b)).
- (2) Record the results of each monthly inspection in a contemporaneous log, including the date of inspection and any corrective actions taken (40 CFR Part 60.674(b)).
- New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b))

The permittee, upon issuance date of this permit, shall:

- (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Shielded Requirements

No Shielded Requirements



# Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

### **Section VI. Specific Operating Conditions (continued)**

BH2.Emission Unit PF1.152 Location North 4.447.28 km, East 531.63 km, UTM (Zone 11, NAD 83)

Syst	System 50B – Cortez Hills CHOP Aggregate Plant – Double Deck Screen	
DE	1.152	Double Deck Screen and associated transfers in (Jaw Discharge Conveyor) and out (Cone Loading
FF		Conveyor, Backfill Conveyor, Screen Discharge Conveyor)

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from **PF1.152** shall be controlled by water sprays located at **PF1.152**.

- 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Emission Limits</u>
  - a. On and after the date of startup of **PF1.152**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.152** the following pollutants in excess of the following specified limits:
    - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.30** pound per hour, nor more than **0.37** ton per year, based on a 12-month rolling period. This limit is less than the **66.31** pounds per hour maximum allowable emission limit for **PF1.152** as determined from NAC 445B.22033 and the maximum allowable throughput as limited in BH2.3.a of this section.
    - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.88** pound per hour, nor more than **1.10** ton per year, based on a 12-month rolling period.
    - (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from **PF1.152** will not equal or exceed **20%** in accordance with NAC 445B.22017.
  - b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)

On and after the sixtieth day after achieving the maximum production rate at which **PF1.152** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Process fugitive emissions from **PF1.152** will not exceed **7%** opacity (40 CFR Part 60.672(b)).
- (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- (3) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.152** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).
- 3. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

### **Operating Parameters**

- a. The maximum allowable throughput rate for **PF1.152** will not exceed **400.0** tons of **aggregate** per any one-hour period.
- b. The maximum annual throughput rate for **PF1.152** will not exceed **1,000,000.0** tons of **aggregate** per year, based on a 12-month rolling period.
- c. Hours

**PF1.152** may operate a total of **8,760** hours per year.

### BUREAU OF AIR POLLUTION CONTROL

# Facility ID No. A0001

### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

**BH2.Emission Units PF1.152 (continued)** 

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of aggregate for PF1.152 on a daily basis.
- (2) Monitor and record the hours of operation for **PF1.152** on a daily basis.
- (3) Monitor and record the throughput rate of aggregate for **PF1.152** on a cumulative monthly basis, for each 12-month rolling period.
- (4) Conduct a daily observation of the water sprays and verify that they are operating normally; record the time of the observation and indicate if the water sprays are operating normally. Monitor and record that all water spray heads are operating normally. Record any water sprays that were repaired, replaced, or modified.
- (5) Conduct and record a visible emissions test on **PF1.152** in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **PF1.152** is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (6) The required monitoring established in (1) through (5) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day, that **PF1.152** is operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of aggregate, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of aggregate, for each 12-month rolling period.
  - (f) Results and verification of the daily observations and the implementation and proper use of the water sprays, and any corrective actions taken in order to maintain implementation and proper use of the water sprays used for control of emissions.
  - (g) The results of each visible emissions tests and any corrective action taken.
- b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)

The permittee, upon issuance date of this permit, shall:

- (1) Inspect the water sprays on **PF1.152** during each month of operation to check that the water is flowing to discharge spray nozzles in the wet suppression system (40 CFR Part 60.674(b)).
- (2) Record the results of each monthly inspection in a contemporaneous log, including the date of inspection and any corrective actions taken (40 CFR Part 60.674(b)).
- c. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b))

The permittee, upon issuance date of this permit, shall:

- (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>

No Shielded Requirements

## **BUREAU OF AIR POLLUTION CONTROL**

# Facility ID No. A0001

### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

### **Section VI. Specific Operating Conditions** (continued)

BH3.Emission Unit PF1.153 Location North 4,447.27 km, East 531.66 km, UTM (Zone 11, NAD 83)

	BH3. System 50C – Cortez Hills CHOP Aggregate Plant – Secondary Cone Crusher		
ſ	DE	1.153	Secondary Cone Crusher and associated transfers in (Cone Loading Conveyor) and out (Cone
	PF		Discharge Conveyor)

1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 

Air Pollution Control Equipment

Emissions from **PF1.153** shall be controlled by water sprays located at **PF1.153**.

2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits

- a. On and after the date of startup of **PF1.153**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.153** the following pollutants in excess of the following specified limits:
  - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.22** pound per hour, nor more than **0.27** ton per year, based on a 12-month rolling period. This limit is less than the **66.31** pounds per hour maximum allowable emission limit for **PF1.153** as determined from NAC 445B.22033 and the maximum allowable throughput as limited in BH3.3.a of this section.
  - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.48** pound per hour, nor more than **0.60** ton per year, based on a 12-month rolling period.
  - (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from **PF1.153** will not equal or exceed **20%** in accordance with NAC 445B.22017.
- b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)
  - On and after the sixtieth day after achieving the maximum production rate at which **PF1.153** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:
  - (1) Process fugitive emissions from **PF1.153** will not exceed **12%** opacity (40 CFR Part 60.672(b)).
  - (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
  - (3) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.153** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. The maximum allowable throughput rate for **PF1.153** will not exceed **400.0** tons of **aggregate** per any one-hour period.
- b. The maximum annual throughput rate for **PF1.153** will not exceed **1,000,000.0** tons of **aggregate** per year, based on a 12-month rolling period.
- c. Hours
  - **PF1.153** may operate a total of **8,760** hours per year.

### **BUREAU OF AIR POLLUTION CONTROL**

# Facility ID No. A0001

### Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

**BH3.Emission Unit PF1.153 (continued)** 

- NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of aggregate for **PF1.153** on a daily basis.
- (2) Monitor and record the hours of operation for **PF1.153** on a daily basis.
- (3) Monitor and record the throughput rate of aggregate for **PF1.153** on a cumulative monthly basis, for each 12-month rolling period.
- (4) Conduct a daily observation of the water sprays and verify that they are operating normally; record the time of the observation and indicate if the water sprays are operating normally. Monitor and record that all water spray heads are operating normally. Record any water sprays that were repaired, replaced, or modified.
- (5) Conduct and record a visible emissions test on **PF1.153** in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that PF1.153 is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (6) The required monitoring established in (1) through (5) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day, that **PF1.153** is operating:
  - The calendar date of any required monitoring.
  - The total daily throughput rate of aggregate, in tons, for the corresponding date.
  - The total daily hours of operation for the corresponding date. (c)
  - The corresponding average hourly throughput rate of aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - The cumulative monthly throughput rate of aggregate, for each 12-month rolling period.
  - Results and verification of the daily observations and the implementation and proper use of the water sprays, and any corrective actions taken in order to maintain implementation and proper use of the water sprays used for control of emissions.
  - The results of each visible emissions tests and any corrective action taken.
- New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)

The permittee, upon issuance date of this permit, shall:

- (1) Inspect the water sprays on **PF1.153** during each month of operation to check that the water is flowing to discharge spray nozzles in the wet suppression system (40 CFR Part 60.674(b)).
- (2) Record the results of each monthly inspection in a contemporaneous log, including the date of inspection and any corrective actions taken (40 CFR Part 60.674(b)).
- New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b))

The permittee, upon issuance date of this permit, shall:

- (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Shielded Requirements

No Shielded Requirements



## Facility ID No. A0001

### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

### **Section VI. Specific Operating Conditions** (continued)

**BH4.Emission Unit PF1.154** Location North 4,447.28 km, East 531.69 km, UTM (Zone 11, NAD 83) Emission Units PF1.155 – PF1.156 Location North 4,447.25 km, East 531.63 km, UTM (Zone 11, NAD 83)

Emission Units PF1.157 - PF1.160 Location North 4,447.28 km, East 531.68 km, UTM (Zone 11, NAD 83) BH4. System 50D - Cortez Hills CHOP Aggregate Plant - Aggregate Transfers 1.154 | Jaw Discharge Conveyor transfer to Aggregate Stockpile 1.155 | Backfill Conveyor transfer to Backfill Radial Stacker PF 1.156 Backfill Radial Stacker transfer to Backfill Stockpile PF 1.157 Screen Discharge Conveyor transfer to Product Conveyor PF 1.158 Cone Discharge Conveyor transfer to Product Conveyor PF 1.159 Product Conveyor transfer to Product Radial Stacker PF Product Radial Stacker transfer to Product Stockpile 1.160

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from PF1.154 – PF1.160 shall be controlled by water sprays located at PF1.154 – PF1.160, each.

- 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
  - a. On and after the date of startup of **PF1.154 PF1.160**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.154 PF1.160**, the following pollutants in excess of the following specified limits:
    - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.018** pound per hour each, nor more than **0.023** ton per year each, based on a 12-month rolling period. This limit is less than the **66.31** pounds per hour maximum allowable emission limit for **PF1.154 PF1.160** each, as determined from NAC 445B.22033 and the maximum allowable throughput as limited in BH4.3.a of this section.
    - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.056** pound per hour each, nor more than **0.070** ton per year each, based on a 12-month rolling period.
    - (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from **PF1.154 PF1.160** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.
  - b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)

On and after the sixtieth day after achieving the maximum production rate at which **PF1.155**, **PF1.157** – **PF1.159** each, will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Process fugitive emissions from **PF1.155**, **PF1.157 PF1.159** each, will not exceed **7%** opacity (40 CFR Part 60.672(b)).
- (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- (3) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.155**, **PF1.157 PF1.159** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).
- 3. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

#### **Operating Parameters**

- a. The maximum allowable throughput rate for **PF1.154 PF1.160** each, will not exceed **400.0** tons of **aggregate** per any one-hour period.
- b. The maximum annual throughput rate for **PF1.154 PF1.160** each, will not exceed **1,000,000.0** tons of **aggregate** per year, based on a 12-month rolling period.
- c. Hours
  - PF1.154 PF1.160 each, may operate a total of 8,760 hours per year.

### BUREAU OF AIR POLLUTION CONTROL

# Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

BH4.Emission Units PF1.154 – PF1.160 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of aggregate for **PF1.154 PF1.160** each, on a daily basis.
- (2) Monitor and record the hours of operation for **PF1.154 PF1.160** each, on a daily basis.
- (3) Monitor and record the throughput rate of aggregate for **PF1.154 PF1.160** each, on a cumulative monthly basis, for each 12-month rolling period.
- (4) Conduct a daily observation of the water sprays and verify that they are operating normally; record the time of the observation and indicate if the water sprays are operating normally. Monitor and record that all water spray heads are operating normally. Record any water sprays that were repaired, replaced, or modified.
- (5) Conduct and record a visible emissions test on **PF1.154 PF1.160** each, in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **PF1.154 PF1.160** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (6) The required monitoring established in (1) through (5) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.154 PF1.160** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of aggregate, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of aggregate, for each 12-month rolling period.
  - (f) Results and verification of the daily observations and the implementation and proper use of the water sprays, and any corrective actions taken in order to maintain implementation and proper use of the water sprays used for control of emissions.
  - (g) The results of each visible emissions tests and any corrective action taken.
- b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)

The permittee, upon issuance date of this permit, shall:

- (1) Inspect the water sprays on **PF1.155**, **PF1.157 PF1.159** each, during each month of operation to check that the water is flowing to discharge spray nozzles in the wet suppression system (40 CFR Part 60.674(b)).
- (2) Record the results of each monthly inspection in a contemporaneous log, including the date of inspection and any corrective actions taken (40 CFR Part 60.674(b)).
- c. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b))
  The permittee, upon issuance date of this permit, shall:
  - (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>

No Shielded Requirements

### **BUREAU OF AIR POLLUTION CONTROL**

# Facility ID No. A0001

### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

### **Section VI. Specific Operating Conditions** (continued)

**BI1. Emission Units PF1.161 and PF1.165** Location North 4,455.91 km, East 526.70 km, UTM (Zone 11, NAD 83)

	System 51A – Tails Dam Aggregate Plant – Primary Crushing	
PI	1.161	Jaw Crusher J-001 and associated transfers in (Loader) and out (Jaw 1 Discharge Conveyor)
PI	1.165	Jaw Crusher J-002 and associated transfers in (Loader) and out (Jaw 2 Discharge Conveyor)

1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 

Air Pollution Control Equipment

Emissions from PF1.161 and PF1.165, each.

- 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
  - a. On and after the date of startup of **PF1.161** and **PF1.165**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.161** and **PF1.165** the following pollutants in excess of the following specified limits:
    - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.43** pound per hour each, nor more than **0.70** ton per year each, based on a 12-month rolling period. This limit is less than the **74.74** pounds per hour maximum allowable emission limit for **PF1.161** and **PF1.165** each, as determined from NAC 445B.22033 and the maximum allowable throughput as limited in BI1.3.a of this section.
    - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.96** pound per hour each, nor more than **1.56** tons per year each, based on a 12-month rolling period.
    - (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from **PF1.161 and PF1.165** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.
  - b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)

On and after the sixtieth day after achieving the maximum production rate at which **PF1.161** and **PF1.165** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Process fugitive emissions from **PF1.161** and **PF1.165** each, will not exceed **12%** opacity (40 CFR Part 60.672(b)).
- (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- (3) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.161** and **PF1.165** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

### **Operating Parameters**

- a. The maximum allowable throughput rate for **PF1.161** and **PF1.165** each, will not exceed **800.0** tons of **aggregate** per any one-hour period.
- b. The maximum annual throughput rate for **PF1.161** and **PF1.165** each, will not exceed **2,600,000.0** tons of **aggregate** per year, based on a 12-month rolling period.
- c. Hours

PF1.161 and PF1.165 each, may operate a total of 8,760 hours per year.

### **BUREAU OF AIR POLLUTION CONTROL**

# Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

#### BI1. Emission Units PF1.161 and PF1.165 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of aggregate for **PF1.161** and **PF1.165** each, on a daily basis.
- (2) Monitor and record the hours of operation for **PF1.161** and **PF1.165** each, on a daily basis.
- (3) Monitor and record the throughput rate of aggregate for **PF1.161** and **PF1.165** each, on a cumulative monthly basis, for each 12-month rolling period.
- (4) Conduct a daily observation of the water sprays and verify that they are operating normally; record the time of the observation and indicate if the water sprays are operating normally. Monitor and record that all water spray heads are operating normally. Record any water sprays that were repaired, replaced, or modified.
- (5) Conduct and record a visible emissions test on **PF1.161 and PF1.165** each, in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **PF1.161 and PF1.165** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (6) The required monitoring established in (1) through (5) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day, that **PF1.161 and PF1.165** each, is operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of aggregate, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of aggregate, for each 12-month rolling period.
  - (f) Results and verification of the daily observations and the implementation and proper use of the water sprays, and any corrective actions taken in order to maintain implementation and proper use of the water sprays used for control of emissions.
  - (g) The results of each visible emissions tests and any corrective action taken.
- b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)

The permittee, upon issuance date of this permit, shall:

- (1) Inspect the water sprays on **PF1.161 and PF1.165** each, during each month of operation to check that the water is flowing to discharge spray nozzles in the wet suppression system (40 CFR Part 60.674(b)).
- (2) Record the results of each monthly inspection in a contemporaneous log, including the date of inspection and any corrective actions taken (40 CFR Part 60.674(b)).
- c. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b)) The permittee, upon issuance date of this permit, shall:
  - (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>
   No Shielded Requirements

### **BUREAU OF AIR POLLUTION CONTROL**

# Facility ID No. A0001

### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

**BI2. Emission Units PF1.162 and PF1.166** Location North 4,455.92 km, East 526.69 km, UTM (Zone 11, NAD 83)

System 51B – Tails Dam Aggregate Plant – Primary Screening				
PF	1.162	3-Deck Screen S-001A and associated transfers in (Jaw 1 Discharge Conveyor) and out (Cone 1		
		Loading Conveyor, Conveyor C-005, Conveyor C-027)		
PF	1.166	3-Deck Screen S-002A and associated transfers in (Jaw 2 Discharge Conveyor) and out (Cone 2		
		Loading Conveyor, Conveyor C-005, Conveyor C-028)		

1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 

Air Pollution Control Equipment

Emissions from PF1.162 and PF1.166 shall be controlled by water sprays located at PF1.162 and PF1.166, each.

#### 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits

- a. On and after the date of startup of **PF1.162** and **PF1.166**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.162** and **PF1.166** the following pollutants in excess of the following specified limits:
  - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.59** pound per hour each, nor more than **0.96** ton per year each, based on a 12-month rolling period. This limit is less than the **74.74** pounds per hour maximum allowable emission limit for **PF1.162** and **PF1.166** each, as determined from NAC 445B.22033 and the maximum allowable throughput as limited in BI2.3.a of this section.
  - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **1.76** pounds per hour each, nor more than **2.86** tons per year each, based on a 12-month rolling period.
  - (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from **PF1.162 and PF1.166** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.
- b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)

On and after the sixtieth day after achieving the maximum production rate at which **PF1.162** and **PF1.166** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Process fugitive emissions from **PF1.162** and **PF1.166** each, will not exceed **7%** opacity (40 CFR Part 60.672(b)).
- (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- (3) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.162** and **PF1.166** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. The maximum allowable throughput rate for **PF1.162** and **PF1.166** each, will not exceed **800.0** tons of **aggregate** per any one-hour period.
- b. The maximum annual throughput rate for **PF1.162** and **PF1.166** each, will not exceed **2,600,000.0** tons of **aggregate** per year, based on a 12-month rolling period.
- c. Hours

PF1.162 and PF1.166 each, may operate a total of 8,760 hours per year.

### **BUREAU OF AIR POLLUTION CONTROL**

# Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

## **Section VI. Specific Operating Conditions** (continued)

BI2. Emission Units PF1.162 and PF1.166 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of aggregate for **PF1.162** and **PF1.166** each, on a daily basis.
- (2) Monitor and record the hours of operation for **PF1.162** and **PF1.166** each, on a daily basis.
- (3) Monitor and record the throughput rate of aggregate for **PF1.162 and PF1.166** each, on a cumulative monthly basis, for each 12-month rolling period.
- (4) Conduct a daily observation of the water sprays and verify that they are operating normally; record the time of the observation and indicate if the water sprays are operating normally. Monitor and record that all water spray heads are operating normally. Record any water sprays that were repaired, replaced, or modified.
- (5) Conduct and record a visible emissions test on **PF1.162 and PF1.166** each, in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **PF1.162 and PF1.166** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (6) The required monitoring established in (1) through (5) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day, that **PF1.162 and PF1.166** each, is operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of aggregate, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of aggregate, for each 12-month rolling period.
  - (f) Results and verification of the daily observations and the implementation and proper use of the water sprays, and any corrective actions taken in order to maintain implementation and proper use of the water sprays used for control of emissions.
  - (g) The results of each visible emissions tests and any corrective action taken.
- b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)

The permittee, upon issuance date of this permit, shall:

- (1) Inspect the water sprays on **PF1.162 and PF1.166** each, during each month of operation to check that the water is flowing to discharge spray nozzles in the wet suppression system (40 CFR Part 60.674(b)).
- (2) Record the results of each monthly inspection in a contemporaneous log, including the date of inspection and any corrective actions taken (40 CFR Part 60.674(b)).
- c. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b)) The permittee, upon issuance date of this permit, shall:
  - (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>

   No Shielded Requirements



# Facility ID No. A0001

### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

### **Section VI. Specific Operating Conditions (continued)**

**BI3. Emission Unit PF1.163** Location North 4,455.94 km, East 526.71 km, UTM (Zone 11, NAD 83) Emission Unit PF1.167 Location North 4,455.92 km, East 526.67 km, UTM (Zone 11, NAD 83)

System 51C – Tails Dam Aggregate Plant – Secondary Crushing			
PF	1.163	Cone Crusher CC-001 and associated transfers in (Cone 1 Loading Conveyor) and out (Cone 1	
		Discharge Conveyor)	
PF	1.167	Cone Crusher CC-002 and associated transfers in (Cone 2 Loading Conveyor) and out (Cone 2	
		Discharge Conveyor)	

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from PF1.163 and PF1.167, each.

2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits

- a. On and after the date of startup of **PF1.163 and PF1.167**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.163 and PF1.167** the following pollutants in excess of the following specified limits:
  - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.16** pound per hour each, nor more than **0.28** ton per year each, based on a 12-month rolling period. This limit is less than the **63.00** pounds per hour maximum allowable emission limit for **PF1.163** and **PF1.167** each, as determined from NAC 445B.22033 and the maximum allowable throughput as limited in BI3.3.a of this section.
  - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.36** pound per hour each, nor more than **0.62** ton per year each, based on a 12-month rolling period.
  - (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from **PF1.163 and PF1.167** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.
- b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)

On and after the sixtieth day after achieving the maximum production rate at which **PF1.163 and PF1.167** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Process fugitive emissions from **PF1.163 and PF1.167** each, will not exceed **12%** opacity (40 CFR Part 60.672(b)).
- (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- (3) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.163** and **PF1.167** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

### **Operating Parameters**

- a. The maximum allowable throughput rate for **PF1.163 and PF1.167** each, will not exceed **300.0** tons of **aggregate** per any one-hour period.
- b. The maximum annual throughput rate for **PF1.163 and PF1.167** each, will not exceed **1,040,000.0** tons of **aggregate** per year, based on a 12-month rolling period.
- c. Hours
  - **PF1.163** and **PF1.167** each, may operate a total of **8,760** hours per year.

### **BUREAU OF AIR POLLUTION CONTROL**

# Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

### **Section VI. Specific Operating Conditions** (continued)

BI3. Emission Units PF1.163 and PF1.167 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance
    - The Permittee, upon issuance of this operating permit will:
    - (1) Monitor and record the throughput rate of aggregate for **PF1.163** and **PF1.167** each, on a daily basis.
    - (2) Monitor and record the hours of operation for **PF1.163 and PF1.167** each, on a daily basis.
    - (3) Monitor and record the throughput rate of aggregate **PF1.163 and PF1.167** each, on a cumulative monthly basis, for each 12-month rolling period.
    - (4) Conduct a daily observation of the water sprays and verify that they are operating normally; record the time of the observation and indicate if the water sprays are operating normally. Monitor and record that all water spray heads are operating normally. Record any water sprays that were repaired, replaced, or modified.
    - (5) Conduct and record a visible emissions test on **PF1.163 and PF1.167** each, in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **PF1.163 and PF1.167** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
    - (6) The required monitoring established in (1) through (5) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day, that **PF1.163 and PF1.167** each, is operating:
      - (a) The calendar date of any required monitoring.
      - (b) The total daily throughput rate of aggregate, in tons, for the corresponding date.
      - (c) The total daily hours of operation for the corresponding date.
      - (d) The corresponding average hourly throughput rate of aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
      - (e) The cumulative monthly throughput rate of aggregate, for each 12-month rolling period.
      - (f) Results and verification of the daily observations and the implementation and proper use of the water sprays, and any corrective actions taken in order to maintain implementation and proper use of the water sprays used for control of emissions.
      - (g) The results of each visible emissions tests and any corrective action taken.
  - b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)

The permittee, upon issuance date of this permit, shall:

- (1) Inspect the water sprays on **PF1.163 and PF1.167** each, during each month of operation to check that the water is flowing to discharge spray nozzles in the wet suppression system (40 CFR Part 60.674(b)).
- (2) Record the results of each monthly inspection in a contemporaneous log, including the date of inspection and any corrective actions taken (40 CFR Part 60.674(b)).
- c. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b)) The permittee, upon issuance date of this permit, shall:
  - (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>

   No Shielded Requirements

### BUREAU OF AIR POLLUTION CONTROL

# Facility ID No. A0001

### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

### **Section VI. Specific Operating Conditions** (continued)

**BI4. Emission Unit PF1.164** Location North 4,455.93 km, East 526.70 km, UTM (Zone 11, NAD 83) Location North 4,455.92 km, East 526.68 km, UTM (Zone 11, NAD 83)

2000 11, 11 100 200 11, 11 100 00 11, 11 100				
System 51D – Tails Dam Aggregate Plant – Secondary Screening				
PF	1.164	2-Deck Screen S-001B and associated transfers in (Cone 1 Discharge Conveyor) and out (Conveyor		
		C-005, Conveyor C-016, Conveyor C-031)		
PF	1.168	2-Deck Screen S-002B and associated transfers in (Cone 2 Discharge Conveyor) and out (Conveyor		
		C-005, Conveyor C-016, Conveyor C-030)		

1. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

Air Pollution Control Equipment

Emissions from PF1.164 and PF1.168, each.

2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits

- a. On and after the date of startup of **PF1.164** and **PF1.168**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.164** and **PF1.168** the following pollutants in excess of the following specified limits:
  - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.22** pound per hour each, nor more than **0.39** ton per year each, based on a 12-month rolling period. This limit is less than the **63.00** pounds per hour maximum allowable emission limit for **PF1.164** and **PF1.168** each, as determined from NAC 445B.22033 and the maximum allowable throughput as limited in BI4.3.a of this section.
  - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.66** pound per hour each, nor more than **1.14** tons per year each, based on a 12-month rolling period.
  - (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from **PF1.164 and PF1.168** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.
- b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)

On and after the sixtieth day after achieving the maximum production rate at which **PF1.164** and **PF1.168** will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Process fugitive emissions from **PF1.164** and **PF1.168** each, will not exceed **7%** opacity (40 CFR Part 60.672(b)).
- (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- (3) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.164** and **PF1.168** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. The maximum allowable throughput rate for **PF1.164** and **PF1.168** each, will not exceed **300.0** tons of **aggregate** per any one-hour period.
- b. The maximum annual throughput rate for **PF1.164** and **PF1.168** each, will not exceed **1,040,000.0** tons of **aggregate** per year, based on a 12-month rolling period.
- c. Hours

PF1.164 and PF1.168 each, may operate a total of 8,760 hours per year.

### **BUREAU OF AIR POLLUTION CONTROL**

# Facility ID No. A0001

### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

### **Section VI. Specific Operating Conditions** (continued)

BI4. Emission Units PF1.164 and PF1.168 (continued)

a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of aggregate for **PF1.164** and **PF1.168** each, on a daily basis.
- (2) Monitor and record the hours of operation for PF1.164 and PF1.168 each, on a daily basis.
- (3) Monitor and record the throughput rate of aggregate for **PF1.164 and PF1.168** each, on a cumulative monthly basis, for each 12-month rolling period.
- (4) Conduct a daily observation of the water sprays and verify that they are operating normally; record the time of the observation and indicate if the water sprays are operating normally. Monitor and record that all water spray heads are operating normally. Record any water sprays that were repaired, replaced, or modified.
- (5) Conduct and record a visible emissions test on **PF1.164 and PF1.168** each, in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **PF1.164 and PF1.168** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (6) The required monitoring established in (1) through (5) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day, that **PF1.164 and PF1.168** each, is operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of aggregate, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of aggregate, for each 12-month rolling period.
  - (f) Results and verification of the daily observations and the implementation and proper use of the water sprays, and any corrective actions taken in order to maintain implementation and proper use of the water sprays used for control of emissions.
  - (g) The results of each visible emissions tests and any corrective action taken.
- b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)

The permittee, upon issuance date of this permit, shall:

- (1) Inspect the water sprays on **PF1.164 and PF1.168** each, during each month of operation to check that the water is flowing to discharge spray nozzles in the wet suppression system (40 CFR Part 60.674(b)).
- (2) Record the results of each monthly inspection in a contemporaneous log, including the date of inspection and any corrective actions taken (40 CFR Part 60.674(b)).
- c. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b)) The permittee, upon issuance date of this permit, shall:
  - (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  Shielded Requirements
  No Shielded Requirements

No Shielded Requirements

### **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001 Permit No. AP1041-2141

## CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

## **Section VI. Specific Operating Conditions** (continued)

BI5. Emission Unit PF1.169	Location North 4,455.93 km, East 526.71 km, UTM (Zone 11, NAD 83)
Emission Unit PF1.170	Location North 4,455.94 km, East 526.72 km, UTM (Zone 11, NAD 83)
Emission Unit PF1.171	Location North 4,455.95 km, East 526.71 km, UTM (Zone 11, NAD 83)
Emission Unit PF1.172	Location North 4,455.97 km, East 526.71 km, UTM (Zone 11, NAD 83)
Emission Unit PF1.173	Location North 4,456.23 km, East 526.58 km, UTM (Zone 11, NAD 83)
Emission Unit PF1.174	Location North 4,456.49 km, East 526.46 km, UTM (Zone 11, NAD 83)
Emission Unit PF1.175	Location North 4,456.77 km, East 526.51 km, UTM (Zone 11, NAD 83)
Emission Unit PF1.176	Location North 4,457.06 km, East 526.56 km, UTM (Zone 11, NAD 83)
Emission Unit PF1.177	Location North 4,457.07 km, East 526.57 km, UTM (Zone 11, NAD 83)
Emission Unit PF1.178	Location North 4,457.09 km, East 526.57 km, UTM (Zone 11, NAD 83)
Emission Unit PF1.179	Location North 4,457.11 km, East 526.57 km, UTM (Zone 11, NAD 83)
Emission Unit PF1.180	Location North 4,457.39 km, East 526.62 km, UTM (Zone 11, NAD 83)

Syst	System 51E – Tails Dam Aggregate Plant – Conveyor Transfers				
PF	1.169	Conveyor C-005 transfer to Conveyor C-006			
PF	1.170	Conveyor C-006 transfer to Conveyor C-007			
PF	1.171	Conveyor C-007 transfer to Conveyor C-008			
PF	1.172	Conveyor C-008 transfer to Conveyor C-009			
PF	1.173	Conveyor C-009 transfer to Conveyor C-010			
PF	1.174	Conveyor C-010 transfer to Conveyor C-011			
PF	1.175	Conveyor C-011 transfer to Conveyor C-012			
PF	1.176	Conveyor C-012 transfer to Conveyor C-013			
PF	1.177	Conveyor C-013 transfer to Conveyor C-014			
PF	1.178	Conveyor C-014 transfer to Conveyor C-015			
PF	1.179	Conveyor C-015 transfer to Super Stacker SS-001			
PF	1.180	Super Stacker SS-001 transfer to Aggregate Stockpile 1			

NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from PF1.169 – PF1.180 shall be controlled by water sprays located at PF1.169 – PF1.180, each.



### Facility ID No. A0001

#### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

#### **Section VI. Specific Operating Conditions** (continued)

BI5. Emission Units PF1.169 - PF1.180 (continued)

- 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
  - a. On and after the date of startup of **PF1.169 PF1.180**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.169 PF1.180**, the following pollutants in excess of the following specified limits:
    - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.032** pound per hour each, nor more than **0.053** ton per year each, based on a 12-month rolling period. This limit is less than the **73.06** pounds per hour maximum allowable emission limit for **PF1.169 PF1.180** each, as determined from NAC 445B.22033 and the maximum allowable throughput as limited in BI5.3.a of this section.
    - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.098** pound per hour each, nor more than **0.16** ton per year each, based on a 12-month rolling period.
    - (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from **PF1.169 PF1.180** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.
  - b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)
    - On and after the sixtieth day after achieving the maximum production rate at which **PF1.169 PF1.179** each, will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:
    - (1) Process fugitive emissions from **PF1.169 PF1.179** each, will not exceed **7%** opacity (40 CFR Part 60.672(b)).
    - (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
    - (3) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.169 PF1.179** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).
- 3. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - Operating Parameters
  - a. The maximum allowable throughput rate for **PF1.169 PF1.180** each, will not exceed **700.0** tons of **aggregate** per any one-hour period.
  - b. The maximum annual throughput rate for **PF1.169 PF1.180** each, will not exceed **2,288,000.0** tons of **aggregate** per year, based on a 12-month rolling period.
  - c. Hours
    - PF1.169 PF1.180 each, may operate a total of 8,760 hours per year.

#### **BUREAU OF AIR POLLUTION CONTROL**

### Facility ID No. A0001

#### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

#### **Section VI. Specific Operating Conditions** (continued)

BI5. Emission Units PF1.169 - PF1.180 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of aggregate for **PF1.169 PF1.180** each, on a daily basis.
- (2) Monitor and record the hours of operation for **PF1.169 PF1.180** each, on a daily basis.
- (3) Monitor and record the throughput rate of aggregate for **PF1.169 PF1.180** each, on a cumulative monthly basis, for each 12-month rolling period.
- (4) Conduct a daily observation of the water sprays and verify that they are operating normally; record the time of the observation and indicate if the water sprays are operating normally. Monitor and record that all water spray heads are operating normally. Record any water sprays that were repaired, replaced, or modified.
- (5) Conduct and record a visible emissions test on **PF1.169 PF1.180** each, in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **PF1.169 PF1.180** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (6) The required monitoring established in (1) through (5) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.169 PF1.180** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of aggregate, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of aggregate, for each 12-month rolling period.
  - (f) Results and verification of the daily observations and the implementation and proper use of the water sprays, and any corrective actions taken in order to maintain implementation and proper use of the water sprays used for control of emissions.
  - (g) The results of each visible emissions tests and any corrective action taken.
- b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)

The permittee, upon issuance date of this permit, shall:

- (1) Inspect the water sprays on **PF1.169 PF1.179** each, during each month of operation to check that the water is flowing to discharge spray nozzles in the wet suppression system (40 CFR Part 60.674(b)).
- (2) Record the results of each monthly inspection in a contemporaneous log, including the date of inspection and any corrective actions taken (40 CFR Part 60.674(b)).
- c. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b)) The permittee, upon issuance date of this permit, shall:
  - (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>

No Shielded Requirements



#### Facility ID No. A0001

#### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

#### **Section VI. Specific Operating Conditions (continued)**

BI6. Emission Unit PF1.183	Location North 4,455.95 km, East 526.66 km, UTM (Zone 11, NAD 83)
Emission Unit PF1.184	Location North 4,456.21 km, East 526.54 km, UTM (Zone 11, NAD 83)
Emission Unit PF1.185	Location North 4,456.47 km, East 526.42 km, UTM (Zone 11, NAD 83)
Emission Unit PF1.186	Location North 4,456.75 km, East 526.47 km, UTM (Zone 11, NAD 83)
Emission Unit PF1.187	Location North 4,457.04 km, East 526.52 km, UTM (Zone 11, NAD 83)
Emission Unit PF1.188	Location North 4,457.05 km, East 526.52 km, UTM (Zone 11, NAD 83)
Emission Unit PF1.189	Location North 4,457.07 km, East 526.53 km, UTM (Zone 11, NAD 83)
Emission Unit PF1.190	Location North 4,457.09 km, East 526.53 km, UTM (Zone 11, NAD 83)
Emission Unit PF1.191	Location North 4,457.10 km, East 526.53 km, UTM (Zone 11, NAD 83)
Emission Unit PF1.192	Location North 4,457.53 km, East 526.61 km, UTM (Zone 11, NAD 83)

Syst	System 51F – Tails Dam Aggregate Plant – Conveyor Transfers		
PF	1.183	Conveyor C-018 transfer to Conveyor C-019	
PF	1.184	Conveyor C-019 transfer to Conveyor C-020	
PF	1.185	Conveyor C-020 transfer to Conveyor C-021	
PF	1.186	Conveyor C-021 transfer to Conveyor C-022	
PF	1.187	Conveyor C-022 transfer to Conveyor C-023	
PF	1.188	Conveyor C-023 transfer to Conveyor C-024	
PF	1.189	Conveyor C-024 transfer to Conveyor C-025	
PF	1.190	Conveyor C-025 transfer to Conveyor C-026	
PF	1.191	Conveyor C-026 transfer to Super Stacker SS-002	
PF	1.192	Super Stacker SS-002 transfer to Aggregate Stockpile 2	

- 1. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>
  - Air Pollution Control Equipment

Emissions from PF1.183 – PF1.192 shall be controlled by water sprays located at PF1.183 – PF1.192, each.

- 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
  - a. On and after the date of startup of **PF1.183 PF1.192**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.183 PF1.192**, the following pollutants in excess of the following specified limits:
    - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.028** pound per hour each, nor more than **0.045** ton per year each, based on a 12-month rolling period. This limit is less than the **71.16** pounds per hour maximum allowable emission limit for **PF1.183 PF1.192** each, as determined from NAC 445B.22033 and the maximum allowable throughput as limited in BI6.3.a of this section.
    - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.084** pound per hour each, nor more than **0.14** ton per year each, based on a 12-month rolling period.
    - (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from **PF1.183 PF1.192** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.
  - b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)
    - On and after the sixtieth day after achieving the maximum production rate at which **PF1.183 PF1.191** each, will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:
    - (1) Process fugitive emissions from **PF1.183 PF1.191** each, will not exceed **7%** opacity (40 CFR Part 60.672(b)).
    - (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
    - (3) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.183 PF1.191** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).



### Facility ID No. A0001

#### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

#### **Section VI. Specific Operating Conditions** (continued)

BI6. Emission Units PF1.183 - PF1.192 (continued)

3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Operating Parameters**

- a. The maximum allowable throughput rate for **PF1.183 PF1.192** each, will not exceed **600.0** tons of **aggregate** per any one-hour period.
- b. The maximum annual throughput rate for **PF1.183 PF1.192** each, will not exceed **1,976,000.0** tons of **aggregate** per year, based on a 12-month rolling period.
- c. Hours

PF1.183 – PF1.192 each, may operate a total of 8,760 hours per year.

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of aggregate for **PF1.183 PF1.192** each, on a daily basis.
- (2) Monitor and record the hours of operation for **PF1.183 PF1.192** each, on a daily basis.
- (3) Monitor and record the throughput rate of aggregate for **PF1.183 PF1.192** each, on a cumulative monthly basis, for each 12-month rolling period.
- (4) Conduct a daily observation of the water sprays and verify that they are operating normally; record the time of the observation and indicate if the water sprays are operating normally. Monitor and record that all water spray heads are operating normally. Record any water sprays that were repaired, replaced, or modified.
- (5) Conduct and record a visible emissions test on **PF1.183 PF1.192** each, in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **PF1.183 PF1.192** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (6) The required monitoring established in (1) through (5) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.183 PF1.192** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of aggregate, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of aggregate, for each 12-month rolling period.
  - (f) Results and verification of the daily observations and the implementation and proper use of the water sprays, and any corrective actions taken in order to maintain implementation and proper use of the water sprays used for control of emissions.
  - (g) The results of each visible emissions tests and any corrective action taken.

#### BUREAU OF AIR POLLUTION CONTROL

## Facility ID No. A0001

#### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

#### **Section VI. Specific Operating Conditions** (continued)

BI6. Emission Units PF1.183 - PF1.192 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program continued
  - b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)

The permittee, upon issuance date of this permit, shall:

- (1) Inspect the water sprays on **PF1.183 PF1.191** each, during each month of operation to check that the water is flowing to discharge spray nozzles in the wet suppression system (40 CFR Part 60.674(b)).
- (2) Record the results of each monthly inspection in a contemporaneous log, including the date of inspection and any corrective actions taken (40 CFR Part 60.674(b)).
- c. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b)) The permittee, upon issuance date of this permit, shall:
  - (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>

   No Shielded Requirements



#### Permit No. AP1041-2141

### CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

#### **Section VI. Specific Operating Conditions (continued)**

BI7. Emission Unit PF1.193 and PF1.194 Location North 4,455.94 km, East 526.68 km, UTM (Zone 11, NAD 83) **Emission Unit PF1.196** Location North 4,455.94 km, East 526.67 km, UTM (Zone 11, NAD 83) Location North 4,455.95 km, East 526.70 km, UTM (Zone 11, NAD 83) **Emission Unit PF1.197** 

Syst	System 51G – Tails Dam Aggregate Plant – Conveyor Transfers		
PF	1.193	Conveyor C-027 transfer to Conveyor C-029	
PF	1.194	Conveyor C-028 transfer to Conveyor C-029	
PF	1.196	Conveyor C-030 transfer to Conveyor C-032	
PF	1.197	Conveyor C-031 transfer to Conveyor C-032	

NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from PF1.193, PF1.194, PF1.196, and PF1.197 shall be controlled by water sprays located at PF1.193, PF1.194, PF1.196, and PF1.197, each.

2. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### **Emission Limits**

- On and after the date of startup of PF1.193, PF1.194, PF1.196, and PF1.197, the permittee will not discharge or cause the discharge into the atmosphere from PF1.193, PF1.194, PF1.196, and PF1.197, the following pollutants in excess of the following specified limits:
  - (1) NAC 445B.305  $\underline{Part\ 70\ Program}$  The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed 0.007 pound per hour each, nor more than 0.011 ton per year each, based on a 12month rolling period. This limit is less than the 55.44 pounds per hour maximum allowable emission limit for PF1.193, PF1.194, PF1.196, and PF1.197 each, as determined from NAC 445B.22033 and the maximum allowable throughput as limited in BI7.3.a of this section.
  - (2) NAC 445B.305 Part 70 Program The discharge of PM (particulate matter) to the atmosphere will not exceed **0.021** pound per hour each, nor more than **0.033** ton per year each, based on a 12-month rolling period.
  - (3) NAC 445B.22017 (Federally Enforceable SIP Requirement) The opacity from PF1.193, PF1.194, PF1.196, and PF1.197 each, will not equal or exceed 20% in accordance with NAC 445B.22017.
- New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)

On and after the sixtieth day after achieving the maximum production rate at which PF1.193, PF1.194, PF1.196, and **PF1.197** each, will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Process fugitive emissions from PF1.193, PF1.194, PF1.196, and PF1.197 each, will not exceed 7% opacity (40 CFR Part 60.672(b)).
- (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- (3) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate PF1.193, PF1.194, PF1.196, and PF1.197 each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).
- NAC 445B.3405 (NAC 445B.316) Part 70 Program 3.

#### **Operating Parameters**

- The maximum allowable throughput rate for PF1.193, PF1.194, PF1.196, and PF1.197 each, will not exceed 150.0 tons of **aggregate** per any one-hour period.
- The maximum annual throughput rate for PF1.193, PF1.194, PF1.196, and PF1.197 each, will not exceed 468,000.0 tons of aggregate per year, based on a 12-month rolling period.
- Hours
  - PF1.193, PF1.194, PF1.196, and PF1.197 each, may operate a total of 8,760 hours per year.



### Facility ID No. A0001

#### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

### Section VI. Specific Operating Conditions (continued)

BI7. Emission Units PF1.193, PF1.194, PF1.196, and PF1.197 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of aggregate for PF1.193, PF1.194, PF1.196, and PF1.197 each, on a daily basis.
- (2) Monitor and record the hours of operation for PF1.193, PF1.194, PF1.196, and PF1.197 each, on a daily basis.
- (3) Monitor and record the throughput rate of aggregate **PF1.193**, **PF1.194**, **PF1.196**, **and PF1.197** each, on a cumulative monthly basis, for each 12-month rolling period.
- (4) Conduct a daily observation of the water sprays and verify that they are operating normally; record the time of the observation and indicate if the water sprays are operating normally. Monitor and record that all water spray heads are operating normally. Record any water sprays that were repaired, replaced, or modified.
- (5) Conduct and record a visible emissions test on **PF1.193**, **PF1.194**, **PF1.196**, and **PF1.197** each, in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **PF1.193**, **PF1.194**, **PF1.196**, and **PF1.197** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (6) The required monitoring established in (1) through (5) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.193**, **PF1.194**, **PF1.196**, and **PF1.197** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of aggregate, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of aggregate, for each 12-month rolling period.
  - (f) Results and verification of the daily observations and the implementation and proper use of the water sprays, and any corrective actions taken in order to maintain implementation and proper use of the water sprays used for control of emissions.
  - (g) The results of each visible emissions tests and any corrective action taken.
- b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)

The permittee, upon issuance date of this permit, shall:

- (1) Înspect the water sprays on **PF1.193**, **PF1.194**, **PF1.196**, and **PF1.197** each, during each month of operation to check that the water is flowing to discharge spray nozzles in the wet suppression system (40 CFR Part 60.674(b)).
- (2) Record the results of each monthly inspection in a contemporaneous log, including the date of inspection and any corrective actions taken (40 CFR Part 60.674(b)).
- c. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b)) The permittee, upon issuance date of this permit, shall:
  - (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>
  <u>Shielded Requirements</u>
  No Shielded Requirements

No Shielded Requirements



### Facility ID No. A0001

#### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

#### **Section VI. Specific Operating Conditions** (continued)

BI8. Emission Unit PF1.181	Location North 4,455.92 km, East 526.68 km, UTM (Zone 11, NAD 83)
Emission Unit PF1.182	Location North 4,455.93 km, East 526.67 km, UTM (Zone 11, NAD 83)
Emission Unit PF1.195	Location North 4,455.93 km, East 526.67 km, UTM (Zone 11, NAD 83)
Emission Unit PF1.198	Location North 4,455.95 km, East 526.70 km, UTM (Zone 11, NAD 83)
Emission Unit PF1.199	Location North 4,455.96 km, East 526.68 km, UTM (Zone 11, NAD 83)
Emission Unit PF1.200	Location North 4,455.99 km, East 526.67 km, UTM (Zone 11, NAD 83)

Syst	System 51H – Tails Dam Aggregate Plant – Conveyor Transfers		
PF	1.181	Conveyor C-016 transfer to Conveyor C-017	
PF	1.182	Conveyor C-017 transfer to Conveyor C-018	
PF	1.195	Conveyor C-029 transfer to Conveyor C-018	
PF	1.198	Conveyor C-032 transfer to Conveyor C-033	
PF	1.199	Conveyor C-033 transfer to Radial Stacker RS-001	
PF	1.200	Radial Stacker RS-001 transfer to Aggregate Stockpile 3	

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from **PF1.181**, **PF1.182**, **PF1.195**, **and PF1.198** – **PF1.200** shall be controlled by water sprays located at **PF1.181**, **PF1.182**, **PF1.195**, **and PF1.196** – **PF1.200**, each.

- 2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Emission Limits
  - a. On and after the date of startup of **PF1.181**, **PF1.182**, **PF1.195**, **and PF1.198 PF1.200**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.181**, **PF1.182**, **PF1.195**, **and PF1.198 PF1.200**, the following pollutants in excess of the following specified limits:
    - (1) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.014** pound per hour each, nor more than **0.024** ton per year each, based on a 12-month rolling period. This limit is less than the **63.00** pounds per hour maximum allowable emission limit for **PF1.181**, **PF1.182**, **PF1.195**, **and PF1.198 PF1.200** each, as determined from NAC 445B.22033 and the maximum allowable throughput as limited in BI8.3.a of this section.
    - (2) NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.042** pound per hour each, nor more than **0.073** ton per year each, based on a 12-month rolling period.
    - (3) NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from **PF1.181**, **PF1.182**, **PF1.195**, and **PF1.198 PF1.200** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.
  - b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)

On and after the sixtieth day after achieving the maximum production rate at which **PF1.181**, **PF1.182**, **PF1.195**, **PF1.198**, **and PF1.199** each, will be operated, but not later than 180 days after initial startup, the permittee will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

- (1) Process fugitive emissions from **PF1.181**, **PF1.182**, **PF1.195**, **PF1.198**, **and PF1.199** each, will not exceed **7%** opacity (40 CFR Part 60.672(b)).
- (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c)).
- (3) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate **PF1.181**, **PF1.182**, **PF1.195**, **PF1.198**, and **PF1.199** each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d)).



### Facility ID No. A0001

#### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

#### **Section VI. Specific Operating Conditions** (continued)

BI8. Emission Units PF1.181, PF1.182, PF1.195, and PF1.198 - PF1.200 (continued)

3. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>

#### **Operating Parameters**

- a. The maximum allowable throughput rate for **PF1.181**, **PF1.182**, **PF1.195**, and **PF1.198 PF1.200** each, will not exceed **300.0** tons of **aggregate** per any one-hour period.
- b. The maximum annual throughput rate for **PF1.181**, **PF1.182**, **PF1.195**, and **PF1.198 PF1.200** each, will not exceed **1,040,000.0** tons of **aggregate** per year, based on a 12-month rolling period.
- c. Hours

**PF1.181**, **PF1.182**, **PF1.195**, and **PF1.198** – **PF1.200** each, may operate a total of **8,760** hours per year.

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the throughput rate of aggregate for **PF1.181**, **PF1.182**, **PF1.195**, and **PF1.198 PF1.200** each, on a daily basis.
- (2) Monitor and record the hours of operation for **PF1.181**, **PF1.182**, **PF1.195**, **and PF1.198 PF1.200** each, on a daily basis.
- (3) Monitor and record the throughput rate of aggregate **PF1.181**, **PF1.182**, **PF1.195**, **and PF1.198 PF1.200** each, on a cumulative monthly basis, for each 12-month rolling period.
- (4) Conduct a daily observation of the water sprays and verify that they are operating normally; record the time of the observation and indicate if the water sprays are operating normally. Monitor and record that all water spray heads are operating normally. Record any water sprays that were repaired, replaced, or modified.
- (5) Conduct and record a visible emissions test on **PF1.181**, **PF1.182**, **PF1.195**, and **PF1.198 PF1.200** each, in accordance with Reference Method 22 in Appendix A of 40 CFR Part 60 on a weekly basis for any week or a portion thereof that **PF1.181**, **PF1.182**, **PF1.195**, and **PF1.198 PF1.200** each, is operating. If any emissions are noted, Permittee shall conduct and record a visible emissions test in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60 immediately. Each Method 22 and Method 9 test must be conducted while the emission unit is operating. Each Method 9 test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.
- (6) The required monitoring established in (1) through (5) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.181**, **PF1.182**, **PF1.195**, and **PF1.198 PF1.200** each, are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily throughput rate of aggregate, in tons, for the corresponding date.
  - (c) The total daily hours of operation for the corresponding date.
  - (d) The corresponding average hourly throughput rate of aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
  - (e) The cumulative monthly throughput rate of aggregate, for each 12-month rolling period.
  - (f) Results and verification of the daily observations and the implementation and proper use of the water sprays, and any corrective actions taken in order to maintain implementation and proper use of the water sprays used for control of emissions.
  - (g) The results of each visible emissions tests and any corrective action taken.

#### **BUREAU OF AIR POLLUTION CONTROL**

### Facility ID No. A0001

#### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

#### **Section VI. Specific Operating Conditions** (continued)

BI8. Emission Units PF1.181, PF1.182, PF1.195, and PF1.198 - PF1.200 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program continued
  - b. New Source Performance Standards (NSPS) Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60.670)

The permittee, upon issuance date of this permit, shall:

- (1) Inspect the water sprays on **PF1.181**, **PF1.182**, **PF1.195**, **PF1.198**, **and PF1.199** each, during each month of operation to check that the water is flowing to discharge spray nozzles in the wet suppression system (40 CFR Part 60.674(b)).
- (2) Record the results of each monthly inspection in a contemporaneous log, including the date of inspection and any corrective actions taken (40 CFR Part 60.674(b)).
- c. New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b)) The permittee, upon issuance date of this permit, shall:
  - (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>
  <u>Shielded Requirements</u>
  No Shielded Requirements



#### Facility ID No. A0001

#### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

#### **Section VI. Specific Operating Conditions** (continued)

BJ. Emission Units S2.051 & PF1.201 - PF1.202 Location North 4,454.28 km, East 523.57 km, UTM (Zone 11, NAD 83)

Sys	System 52 – A30, 200 Ton Lime Silo			
S	2.051	A30 Lime Silo (pneumatic) Loading		
PF	1.201	A30 Lime Silo Unloading to Lime Conveyor		
PF	1.202	A30 Lime Silo Hopper transfer to Truck		

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from **S2.051** shall be ducted to a control system consisting of a **bin vent** with 100% capture.

Emissions from PF1.201 and PF1.202 each, shall be controlled by an enclosure.

2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 

**Emission Limits** 

a. NAC 445B.305 Part 70 Program

On and after the date of startup of **S2.051**, Permittee will not discharge or cause the discharge into the atmosphere from the bin vent of **S2.051**, the following pollutants in excess of the following specified limits:

- (1) The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.034** pound per hour, nor more than **0.026** ton per year, based on a 12-month rolling period. This limit is less than the **51.28** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited in BJ.3.a. of this section.
- (2) The discharge of PM (particulate matter) to the atmosphere will not exceed **0.099** pound per hour, nor more than **0.074** ton per year, based on a 12-month rolling period.
- (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from the **bin vent discharge of S2.051** will not equal or exceed **20%** in accordance with NAC 445B.22017.
- b. NAC 445B.305 Part 70 Program

On and after the date of startup of **PF1.201 and PF1.202**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.201 and PF1.202**, the following pollutants in excess of the following specified limits:

- (1) The discharge of PM<sub>10</sub> to the atmosphere will not exceed **0.28** pound per hour each, nor more than **0.11** ton per year each, based on a 12-month rolling period. This limit is less than the **58.51** pounds per hour maximum allowable emission limit for **PF1.201** and **PF1.202** each, as determined from NAC 445B.22033 and each maximum allowable throughput as limited in BJ.3.b. of this section.
- (2) The discharge of PM to the atmosphere will not exceed **0.48** pound per hour each, nor more than **0.18** ton per year each, based on a 12-month rolling period.
- (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from **PF1.201 and PF1.202** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.
- 3. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

**Operating Parameters** 

- a. The maximum allowable loading rate for **S2.051** will not exceed **100** tons of **lime** per any one-hour period, nor more than **150,000** tons of **lime** per year, based on a 12-month rolling period.
- b. The maximum allowable discharge rate for **PF1.201** and **PF1.202** each, will not exceed **200** tons of **lime** per any one-hour period, nor more than **150,000** tons of **lime** per year, based on a 12-month rolling period.
- c. Hours
  - (1) **S2.051 and PF1.201 PF1.202** each, may operate **8,760** hours per calendar year.



# Facility ID No. A0001 Permit No. AP1041-2141 CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

#### **Section VI. Specific Operating Conditions** (continued)

#### BJ. Emission Units S2.051 and PF1.201 - PF1.202 (continued)

- NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance
    - The Permittee, upon issuance of this operating permit will:
    - (1) Monitor and record the loading rate of lime for **S2.051** on a daily basis.
    - (2) Monitor and record the discharge rate of lime for PF1.201 PF1.202 each, on a daily basis.
    - (3) Monitor and record the hours of operation of S2.051 and PF1.201 PF1.202 each, on a daily basis.
    - (4) Conduct a monthly inspection of the **bin vent on S2.051** in accordance with the manufacturer's operation and maintenance manual and record the results (e.g. the condition of the filter fabric) and any corrective actions taken.
    - (5) Conduct a monthly inspection of the enclosures on PF1.201 and PF1.202 each, and record the results and any corrective action taken.
    - (6) The required monitoring established in (1) through (5) above will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.051 and PF1.201 PF1.202** is operating:
      - (a) The calendar date of any required monitoring.
      - (b) The total daily loading rate of lime, in tons, for the corresponding date.
      - (c) The total daily discharge rate of lime, in tons, for the corresponding date.
      - (d) The total daily loading hours of operation for the corresponding date.
      - (e) The total daily discharge hours of operation for the corresponding date.
      - (f) The corresponding average hourly loading rate of lime, in tons per hour. The average hourly loading rate will be determined from the daily loading rate and the total daily hours of operation recorded in (b) and (d) above.
      - (g) The cumulative monthly loading rate of lime, for each 12-month rolling period.
      - (h) The corresponding average hourly discharge rate of lime, in tons per hour. The average hourly discharge rate will be determined from the daily discharge rate and the total daily hours of operation recorded in (c) and (e) above
      - (i) The cumulative monthly discharge rate of lime, for each 12-month rolling period.
      - (j) Results and verification of the monthly inspections on the **bin vent for S2.051 and enclosures for PF1.201** and **PF1.202** each, and any corrective actions taken in order to maintain implementation and proper use of the **bin vent** and **enclosures** used for control of emissions.
- NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>

   No Shielded Requirements



#### Facility ID No. A0001

#### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

#### **Section VI. Specific Operating Conditions** (continued)

BK. Emission Units S2.052 & PF1.203 - PF1.204 Location North 4,453.85 km, East 524.30 km, UTM (Zone 11, NAD 83)

Sys	System 53 – A30, 200 Ton Lime Silo			
S	2.052	A30 Lime Silo (pneumatic) Loading		
PF	1.203	A30 Lime Silo Unloading to Lime Conveyor		
PF	1.204	Lime Conveyor transfer to Truck		

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from **S2.052** shall be ducted to a control system consisting of a **bin vent** with 100% capture.

Emissions from PF1.203 and PF1.204 each, shall be controlled by an enclosure.

2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 

#### **Emission Limits**

a. NAC 445B.305 Part 70 Program

On and after the date of startup of **S2.052**, Permittee will not discharge or cause the discharge into the atmosphere from the bin vent of **S2.052**, the following pollutants in excess of the following specified limits:

- (1) The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.034** pound per hour, nor more than **0.026** ton per year, based on a 12-month rolling period. This limit is less than the **51.28** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited in BK.3.a. of this section.
- (2) The discharge of PM (particulate matter) to the atmosphere will not exceed **0.099** pound per hour, nor more than **0.074** ton per year, based on a 12-month rolling period.
- (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from the **bin vent discharge of S2.052** will not equal or exceed **20%** in accordance with NAC 445B.22017.

#### b. NAC 445B.305 Part 70 Program

On and after the date of startup of **PF1.203 and PF1.204**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.203 and PF1.204**, the following pollutants in excess of the following specified limits:

- (1) The discharge of PM<sub>10</sub> to the atmosphere will not exceed **0.28** pound per hour each, nor more than **0.11** ton per year each, based on a 12-month rolling period. This limit is less than the **58.51** pounds per hour maximum allowable emission limit for **PF1.203** and **PF1.204** each, as determined from NAC 445B.22033 and each maximum allowable throughput as limited in BK.3.b. of this section.
- (2) The discharge of PM to the atmosphere will not exceed **0.48** pound per hour each, nor more than **0.18** ton per year each, based on a 12-month rolling period.
- (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from **PF1.203 and PF1.204** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.

#### 3. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

#### **Operating Parameters**

- a. The maximum allowable loading rate for **S2.052** will not exceed **100** tons of **lime** per any one-hour period, nor more than **150,000** tons of **lime** per year, based on a 12-month rolling period.
- b. The maximum allowable discharge rate for **PF1.203 and PF1.204** each, will not exceed **200** tons of **lime** per any one-hour period, nor more than **150,000** tons of **lime** per year, based on a 12-month rolling period.
- c. Hours
  - (1) **S2.052 and PF1.203 PF1.204** each, may operate **8,760** hours per calendar year.



# Facility ID No. A0001

#### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

#### **Section VI. Specific Operating Conditions** (continued)

BK. Emission Units S2.052 and PF1.203 - PF1.204 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance
    - The Permittee, upon issuance of this operating permit will:
    - (1) Monitor and record the loading rate of lime for **S2.052** on a daily basis.
    - (2) Monitor and record the discharge rate of lime for PF1.203 PF1.204 each, on a daily basis.
    - (3) Monitor and record the hours of operation of S2.052 and PF1.203 PF1.204 each, on a daily basis.
    - (4) Conduct a monthly inspection of the **bin vent on S2.052** in accordance with the manufacturer's operation and maintenance manual and record the results (e.g. the condition of the filter fabric) and any corrective actions taken.
    - (5) Conduct a monthly inspection of the enclosures on PF1.203 and PF1.204 each, and record the results and any corrective action taken.
    - (6) The required monitoring established in (1) through (5) above will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.052 and PF1.203 PF1.204** is operating:
      - (a) The calendar date of any required monitoring.
      - (b) The total daily loading rate of lime, in tons, for the corresponding date.
      - (c) The total daily discharge rate of lime, in tons, for the corresponding date.
      - (d) The total daily loading hours of operation for the corresponding date.
      - (e) The total daily discharge hours of operation for the corresponding date.
      - (f) The corresponding average hourly loading rate of lime, in tons per hour. The average hourly loading rate will be determined from the daily loading rate and the total daily hours of operation recorded in (b) and (d) above.
      - (g) The cumulative monthly loading rate of lime, for each 12-month rolling period.
      - (h) The corresponding average hourly discharge rate of lime, in tons per hour. The average hourly discharge rate will be determined from the daily discharge rate and the total daily hours of operation recorded in (c) and (e) above
      - (i) The cumulative monthly discharge rate of lime, for each 12-month rolling period.
      - (j) Results and verification of the monthly inspections on the **bin vent for S2.052 and enclosures for PF1.203** and **PF1.204** each, and any corrective actions taken in order to maintain implementation and proper use of the **bin vent** and **enclosures** used for control of emissions.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>
  <u>Shielded Requirements</u>
  No Shielded Requirements

#### **BUREAU OF AIR POLLUTION CONTROL**

### Facility ID No. A0001

#### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

#### **Section VI. Specific Operating Conditions** (continued)

BL. Emission Units S2.053 & PF1.205 - PF1.206 Location North 4,453.87 km, East 523.90 km, UTM (Zone 11, NAD 83)

Syst	System 54 – A30, 200 Ton Lime Silo			
S	2.053	A30 Lime Silo (pneumatic) Loading		
PF	1.205	A30 Lime Silo Unloading to Lime Conveyor		
PF	1.206	Lime Conveyor transfer to Truck		

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from **S2.053** shall be ducted to a control system consisting of a **bin vent** with 100% capture.

Emissions from PF1.205 and PF1.206 each, shall be controlled by an enclosure.

2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 

**Emission Limits** 

a. NAC 445B.305 Part 70 Program

On and after the date of startup of S2.053, Permittee will not discharge or cause the discharge into the atmosphere from the bin vent of S2.053, the following pollutants in excess of the following specified limits:

- (1) The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.034** pound per hour, nor more than **0.026** ton per year, based on a 12-month rolling period. This limit is less than the **51.28** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited in BL.3.a. of this section.
- (2) The discharge of PM (particulate matter) to the atmosphere will not exceed **0.099** pound per hour, nor more than **0.074** ton per year, based on a 12-month rolling period.
- (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from the **bin vent discharge of S2.053** will not equal or exceed **20%** in accordance with NAC 445B.22017.
- b. NAC 445B.305 Part 70 Program

On and after the date of startup of **PF1.205 and PF1.206**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.205 and PF1.206**, the following pollutants in excess of the following specified limits:

- (1) The discharge of PM<sub>10</sub> to the atmosphere will not exceed **0.28** pound per hour each, nor more than **0.11** ton per year each, based on a 12-month rolling period. This limit is less than the **58.51** pounds per hour maximum allowable emission limit for **PF1.205** and **PF1.206** each, as determined from NAC 445B.22033 and each maximum allowable throughput as limited in BL.3.b. of this section.
- (2) The discharge of PM to the atmosphere will not exceed **0.48** pound per hour each, nor more than **0.18** ton per year each, based on a 12-month rolling period.
- (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from **PF1.205 and PF1.206** each, will not equal or exceed **20%** in accordance with NAC 445B.22017.
- 3. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

**Operating Parameters** 

- a. The maximum allowable loading rate for **S2.053** will not exceed **100** tons of **lime** per any one-hour period, nor more than **150,000** tons of **lime** per year, based on a 12-month rolling period.
- b. The maximum allowable discharge rate for **PF1.205** and **PF1.206** each, will not exceed **200** tons of **lime** per any one-hour period, nor more than **150,000** tons of **lime** per year, based on a 12-month rolling period.
- c. Hours
  - (1) **S2.053 and PF1.205 PF1.206** each, may operate **8,760** hours per calendar year.



# Facility ID No. A0001

#### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

#### **Section VI. Specific Operating Conditions** (continued)

#### BL. Emission Units S2.053 and PF1.205 - PF1.206 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* 
  - a. Monitoring, Record keeping and Compliance
    - The Permittee, upon issuance of this operating permit will:
    - (1) Monitor and record the loading rate of lime for **S2.053** on a daily basis.
    - (2) Monitor and record the discharge rate of lime for PF1.205 PF1.206 each, on a daily basis.
    - (3) Monitor and record the hours of operation of S2.053 and PF1.205 PF1.206 each, on a daily basis.
    - (4) Conduct a monthly inspection of the **bin vent on S2.053** in accordance with the manufacturer's operation and maintenance manual and record the results (e.g. the condition of the filter fabric) and any corrective actions taken.
    - (5) Conduct a monthly inspection of the enclosures on PF1.205 and PF1.206 each, and record the results and any corrective action taken.
    - (6) The required monitoring established in (1) through (5) above will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.053 and PF1.205 PF1.206** is operating:
      - (a) The calendar date of any required monitoring.
      - (b) The total daily loading rate of lime, in tons, for the corresponding date.
      - (c) The total daily discharge rate of lime, in tons, for the corresponding date.
      - (d) The total daily loading hours of operation for the corresponding date.
      - (e) The total daily discharge hours of operation for the corresponding date.
      - (f) The corresponding average hourly loading rate of lime, in tons per hour. The average hourly loading rate will be determined from the daily loading rate and the total daily hours of operation recorded in (b) and (d) above.
      - (g) The cumulative monthly loading rate of lime, for each 12-month rolling period.
      - (h) The corresponding average hourly discharge rate of lime, in tons per hour. The average hourly discharge rate will be determined from the daily discharge rate and the total daily hours of operation recorded in (c) and (e) above
      - (i) The cumulative monthly discharge rate of lime, for each 12-month rolling period.
      - (j) Results and verification of the monthly inspections on the **bin vent for S2.053 and enclosures for PF1.205** and **PF1.206** each, and any corrective actions taken in order to maintain implementation and proper use of the **bin vent** and **enclosures** used for control of emissions.
- NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>
   No Shielded Requirements

#### BUREAU OF AIR POLLUTION CONTROL

### Facility ID No. A0001

### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

#### **Section VI. Specific Operating Conditions** (continued)

BM. Emission Units S2.054 & PF1.207 Location North 4,444.53 km, East 533.58 km, UTM (Zone 11, NAD 83)

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Sys	System 55 – Cement Silo		
S	2.054	Cement Silo (pneumatic) Loading	
PF	1.207	Cement Silo Unloading	

#### 1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

#### Air Pollution Control Equipment

Emissions from **S2.054** shall be ducted to a control system consisting of a **bin vent** with 100% capture. Emissions from **PF1.207** shall be controlled by best operating practices.

#### 2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

#### **Emission Limits**

a. NAC 445B.305 Part 70 Program

On and after the date of startup of **S2.054**, Permittee will not discharge or cause the discharge into the atmosphere from the bin vent of **S2.054**, the following pollutants in excess of the following specified limits:

- (1) The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.068** pound per hour, nor more than **0.026** ton per year, based on a 12-month rolling period. This limit is less than the **58.51** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited in BM.3.a. of this section.
- (2) The discharge of PM (particulate matter) to the atmosphere will not exceed **0.20** pound per hour, nor more than **0.074** ton per year, based on a 12-month rolling period.
- (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from the **bin vent discharge of S2.054** will not equal or exceed **20%** in accordance with NAC 445B.22017.

#### b. NAC 445B.305 Part 70 Program

On and after the date of startup of **PF1.207**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.207**, the following pollutants in excess of the following specified limits:

- (1) The discharge of PM<sub>10</sub> to the atmosphere will not exceed **0.56** pound per hour, nor more than **0.21** ton per year, based on a 12-month rolling period. This limit is less than the **58.51** pounds per hour maximum allowable emission limit for **PF1.207**, as determined from NAC 445B.22033 and each maximum allowable throughput as limited in BM.3.b. of this section.
- (2) The discharge of PM to the atmosphere will not exceed **0.96** pound per hour, nor more than **0.36** ton per year, based on a 12-month rolling period.
- (3) NAC 445B.22017 (<u>Federally Enforceable SIP Requirement</u>) The opacity from **PF1.207** will not equal or exceed **20%** in accordance with NAC 445B.22017.

#### 3. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

#### Operating Parameters

- a. The maximum allowable loading rate for **S2.054** will not exceed **200** tons of **cement** per any one-hour period, nor more than **150,000** tons of **cement** per year, based on a 12-month rolling period.
- b. The maximum allowable discharge rate for **PF1.207** will not exceed **200** tons of **cement** per any one-hour period, nor more than **150,000** tons of **cement** per year, based on a 12-month rolling period.
- c. Hours
  - (1) **S2.054 and PF1.207** each, may operate **8,760** hours per calendar year.

# BUREAU OF AIR POLLUTION CONTROL

# Facility ID No. A0001

#### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

#### **Section VI. Specific Operating Conditions** (continued)

BM. Emission Units S2.054 and PF1.207 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- (1) Monitor and record the loading rate of cement for **S2.054** on a daily basis.
- (2) Monitor and record the discharge rate of cement for PF1.207 on a daily basis.
- (3) Monitor and record the hours of operation of **S2.054 and PF1.207** on a daily basis.
- (4) Conduct a monthly inspection of the **bin vent on S2.054** in accordance with the manufacturer's operation and maintenance manual and record the results (e.g. the condition of the filter fabric) and any corrective actions taken.
- (5) The required monitoring established in (1) through (4) above will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.054 and PF1.207** is operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily loading rate of cement, in tons, for the corresponding date.
  - (c) The total daily discharge rate of cement, in tons, for the corresponding date.
  - (d) The total daily loading hours of operation for the corresponding date.
  - (e) The total daily discharge hours of operation for the corresponding date.
  - (f) The corresponding average hourly loading rate of cement, in tons per hour. The average hourly loading rate will be determined from the daily loading rate and the total daily hours of operation recorded in (b) and (d) above.
  - (g) The cumulative monthly loading rate of cement, for each 12-month rolling period.
  - (h) The corresponding average hourly discharge rate of cement, in tons per hour. The average hourly discharge rate will be determined from the daily discharge rate and the total daily hours of operation recorded in (c) and (e) above.
  - (i) The cumulative monthly discharge rate of cement, for each 12-month rolling period.
  - (j) Results and verification of the monthly inspections on the **bin vent for S2.054** and any corrective actions taken in order to maintain implementation and proper use of the **bin vent** used for control of emissions.
- 5. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>

No Shielded Requirements

#### BUREAU OF AIR POLLUTION CONTROL

### Facility ID No. A0001

#### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

#### **Section VI. Specific Operating Conditions (continued)**

**BN. Emission Unit S2.055** Location North 4,452.83 km, East 524.47 km, UTM (Zone 11, NAD 83)

System 56 – A30 Emergency Diesel Generator

S 2.055 A30 Emergency Diesel Generator (2,937 HP, mdl# CAT3516C, mfd 2012)

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from \$2.055 shall have no add-on controls.

2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>; 40CFR60.4200 et. seq.

#### **Emission Limits**

On and after the date of startup of **S2.055**, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **S2.055** the following pollutants in excess of the following specified limits:

- a. NAC 445B.2203 (*Federally Enforceable SIP Requirement*) The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.52** pound per million Btu.
- b. NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.97** pound per hour, nor more than **0.048** ton per year.
- c. NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.97** pound per hour, nor more than **0.048** ton per year.
- d. NAC 445B.305 <u>Part 70 Program</u> The discharge of SO<sub>2</sub> (sulfur dioxide) to the atmosphere will not exceed **0.029** pound per hour, nor more than **0.0015** ton per year.
- e. NAC 445B.305  $\underline{Part\ 70\ Program}$  The discharge of NO<sub>x</sub> (nitrogen oxides) to the atmosphere will not exceed **30.92** pounds per hour, nor more than **1.55** tons per year.
- f. NAC 445B.305 <u>Part 70 Program</u> The discharge of CO (carbon monoxide) to the atmosphere will not exceed **16.91** pounds per hour, nor more than **0.85** ton per year.
- g. NAC 445B.305 <u>Part 70 Program</u> The discharge of VOC (volatile organic compounds) to the atmosphere will not exceed **30.92** pounds per hour, nor more than **1.55** tons per year.
- h. NAC 445B.22047 (*Federally Enforceable SIP Requirement*) The maximum allowable discharge of sulfur to the atmosphere will not exceed **13.23** pounds per hour.
- i. NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from the exhaust stack of **S2.055** will not equal or exceed **20%** in accordance with NAC 445B.22017.
- j. New Source Performance Standards Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR Part 60.4200 et. seq.)
  - Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the following Tier 2 emission standards for new CI engines in 40 CFR Part 60 Subpart IIII (40 CFR Part 60.4205(b); 40 CFR Part 60.4202(a)(2); 40 CFR Part 89.112). For 2007 model year and later emergency stationary CI ICE with engine ratings greater than 560 kW:
  - (1) Particulate Matter (PM) shall not exceed 0.20 grams/kW-hr (0.15 g/hp-hr).
  - (2) Nonmethane Hydrocarbons plus Nitrogen Oxides (NMHC+NOx) shall not exceed 6.4 grams/kW-hr (4.8 g/hp-hr).
  - (3) Carbon Monoxide (CO) shall not exceed 3.5 grams/kW-hr (2.6 g/hp-hr).



### Facility ID No. A0001

#### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

### **Section VI. Specific Operating Conditions** (continued)

#### **BN. Emission Unit S2.055 (continued)**

- 3. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program;</u> 40CFR60.4200 et. seq.; 40CFR63.6590 Operating Parameters
  - a. S2.055 will combust diesel as the primary fuel and will not exceed 138 gallons of diesel combusted per hour.
  - b. The sulfur content of the diesel fuel combusted in S2.055 will not exceed 0.0015% by weight.
  - c. Hours
    - Maintenance checks and readiness testing of **S2.055** is limited to 100 hours per year. There is no time limit on the use of **S2.055** in emergency situations.
  - d. On or before the date of startup of **S2.055**, Permittee will install, calibrate, operate, and maintain a fuel flow meter to monitor the amount of diesel fuel combusted in **S2.055**.
  - e. New Source Performance Standards Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR Part 60.4200 et. seq.)
    - (1) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for non-road diesel fuel (40 CFR Part 60.4207):
      - (a) Sulfur content 15 ppm (0.0015 wt%) maximum for non-road diesel fuel.
      - (b) Cetane index or aromatic content minimum cetane index of 40 or maximum aromatic content of 35 volume percent.
    - (2) Permittee must install a non-resettable hour meter prior to startup of **S2.055** (40CFR60.4209(a)).
    - (3) Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR Part 60.4205(b), as set forth in BN.2.j of this section, according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine (40 CFR Part 60.4206).
  - f. 40 CFR Part 63.6590 Subpart ZZZZ, NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE)(40 CFR Part 63.6590 (c))
    - (1) An affected source that is a new or reconstructed stationary RICE located at an area source, must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines. No further requirements apply for such engines under this part.
- 4. NAC 445B.3405 (NAC 445B.316); NAC 445B.252 *Part 70 Program* 
  - a. Monitoring and Record keeping
    - The Permittee, upon issuance of this operating permit will:
    - (1) Monitor and record the diesel consumption rate for **S2.055** on a daily basis.
    - (2) Monitor and record the hours of operation for **S2.055** on a daily basis.
    - (3) Monitor the sulfur content of the diesel fuel combusted in **S2.055**.
    - (4) The required monitoring established in (1) through (3) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.055** is operating.
      - (a) The calendar date of any required monitoring.
      - (b) The total daily hours of operation for the corresponding date.
      - (c) The monthly hours of operation, and the corresponding hours of operation for the calendar year. The monthly hours of operation will be determined at the end of each calendar month as the daily hours of operation for each day of the calendar month. The monthly hours of operation shall be added beginning in January of each year to insure compliance with BN.3.c of this section.
      - (d) The total daily fuel consumption rate of diesel, in gallons, for the corresponding date.
      - (e) The corresponding average hourly fuel consumption rate of diesel, in gallons per hour. The average hourly fuel consumption rate will be determined from the daily fuel consumption rate and the total daily hours of operation recorded in (b) and (d) above.
      - (f) Maintain on site and make available upon request, certification by the fuel supplier that the sulfur content of the diesel fuel delivered to the Permittee for use in **S2.055** complies with the sulfur limit in BN.3.b of this section.



# Facility ID No. A0001

#### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

#### **Section VI. Specific Operating Conditions (continued)**

BN. Emission Unit S2.055 (continued)

- 4. NAC 445B.3405 (NAC 445B.316); NAC 445B.252 Part 70 Program continued
  - b. 40 CFR Part 60, Subpart IIII Notification, Reporting, and Recordkeeping Requirements (40 CFR 60.4214)
    If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in Table 5 to 40 CFR Part 60, Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time (40 CFR 60.4214(b)).
- 5. 40 CFR Part 60, Subpart IIII Compliance Requirements for Owners and Operators (40 CFR 60.4211)
  - a. The Permittee must comply with the emission standards specified in 40 CFR Part 60, Subpart IIII. The Permittee must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer (40 CFR 60.4211(a)).
  - b. The Permittee must comply with the emission standards specified in 40 CFR 60.4205(b), as set forth in BN.2.j of this section. The Permittee must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4205(b), as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications (40 CFR 60.4211(c)).
  - c. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited (40 CFR 60.4211(f)).
- NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Shielded Requirements</u>
   No Shielded Requirements

#### BUREAU OF AIR POLLUTION CONTROL

### Facility ID No. A0001

#### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

#### **Section VI. Specific Operating Conditions (continued)**

**BO.** Emission Unit **S2.056** Location North 4,442.86 km, East 532.32 km, UTM (Zone 11, NAD 83)

System 57 – A34 Emergency Diesel Generator

S 2.056 A34 Emergency Diesel Generator (2,937 HP, mdl# CAT3516C, mfd 2012)

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from **S2.056** shall have no add-on controls..

 NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>; 40CFR60.4200 et. seq. Emission Limits

On and after the date of startup of **S2.056**, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **S2.056** the following pollutants in excess of the following specified limits:

- a. NAC 445B.2203 (*Federally Enforceable SIP Requirement*) The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.52** pound per million Btu.
- b. NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.97** pound per hour, nor more than **0.048** ton per year.
- c. NAC 445B.305  $\underline{Part\ 70\ Program}$  The discharge of  $PM_{10}$  (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.97** pound per hour, nor more than **0.048** ton per year.
- d. NAC 445B.305 <u>Part 70 Program</u> The discharge of SO<sub>2</sub> (sulfur dioxide) to the atmosphere will not exceed **0.029** pound per hour, nor more than **0.0015** ton per year.
- e. NAC 445B.305  $\underline{Part\ 70\ Program}$  The discharge of NO<sub>x</sub> (nitrogen oxides) to the atmosphere will not exceed **30.92** pounds per hour, nor more than **1.55** tons per year.
- f. NAC 445B.305 <u>Part 70 Program</u> The discharge of CO (carbon monoxide) to the atmosphere will not exceed **16.91** pounds per hour, nor more than **0.85** ton per year.
- g. NAC 445B.305 <u>Part 70 Program</u> The discharge of VOC (volatile organic compounds) to the atmosphere will not exceed **30.92** pounds per hour, nor more than **1.55** tons per year.
- h. NAC 445B.22047 (*Federally Enforceable SIP Requirement*) The maximum allowable discharge of sulfur to the atmosphere will not exceed **13.23** pounds per hour.
- i. NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from the exhaust stack of **S2.056** will not equal or exceed **20%** in accordance with NAC 445B.22017.
- j. New Source Performance Standards Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR Part 60.4200 et. seq.)
  - Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the following Tier 2 emission standards for new CI engines in 40 CFR Part 60 Subpart IIII (40 CFR Part 60.4205(b); 40 CFR Part 60.4202(a)(2); 40 CFR Part 89.112). For 2007 model year and later emergency stationary CI ICE with engine ratings greater than 560 kW:
  - (1) Particulate Matter (PM) shall not exceed 0.20 grams/kW-hr (0.15 g/hp-hr).
  - (2) Nonmethane Hydrocarbons plus Nitrogen Oxides (NMHC+NOx) shall not exceed 6.4 grams/kW-hr (4.8 g/hp-hr).
  - (3) Carbon Monoxide (CO) shall not exceed 3.5 grams/kW-hr (2.6 g/hp-hr).



### Facility ID No. A0001

#### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

### Section VI. Specific Operating Conditions (continued)

#### **BO. Emission Unit S2.056 (continued)**

- 3. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program;</u> 40CFR60.4200 et. seq.; 40CFR63.6590 Operating Parameters
  - a. **S2.056** will combust diesel as the primary fuel and will not exceed **138** gallons of diesel combusted per hour.
  - b. The sulfur content of the diesel fuel combusted in S2.056 will not exceed 0.0015% by weight.
  - c. Hours
    - Maintenance checks and readiness testing of **S2.056** is limited to 100 hours per year. There is no time limit on the use of **S2.056** in emergency situations.
  - d. On or before the date of startup of **S2.056**, Permittee will install, calibrate, operate, and maintain a fuel flow meter to monitor the amount of diesel fuel combusted in **S2.056**.
  - e. New Source Performance Standards Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR Part 60.4200 et. seq.)
    - (1) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for non-road diesel fuel (40 CFR Part 60.4207):
      - (a) Sulfur content 15 ppm (0.0015 wt%) maximum for non-road diesel fuel.
      - (b) Cetane index or aromatic content minimum cetane index of 40 or maximum aromatic content of 35 volume percent.
    - (2) Permittee must install a non-resettable hour meter prior to startup of **S2.056** (40CFR60.4209(a)).
    - (3) Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR Part 60.4205(b), as set forth in BO.2.j of this section, according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine (40 CFR Part 60.4206).
  - f. 40 CFR Part 63.6590 Subpart ZZZZ, NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE)(40 CFR Part 63.6590 (c))
    - (1) An affected source that is a new or reconstructed stationary RICE located at an area source, must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines. No further requirements apply for such engines under this part.
- 4. NAC 445B.3405 (NAC 445B.316); NAC 445B.252 *Part 70 Program* 
  - a. Monitoring and Record keeping
    - The Permittee, upon issuance of this operating permit will:
    - (1) Monitor and record the diesel consumption rate for **S2.056** on a daily basis.
    - (2) Monitor and record the hours of operation for **S2.056** on a daily basis.
    - (3) Monitor the sulfur content of the diesel fuel combusted in **S2.056**.
    - (4) The required monitoring established in (1) through (3) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.056** is operating.
      - (a) The calendar date of any required monitoring.
      - (b) The total daily hours of operation for the corresponding date.
      - (c) The monthly hours of operation, and the corresponding hours of operation for the calendar year. The monthly hours of operation will be determined at the end of each calendar month as the daily hours of operation for each day of the calendar month. The monthly hours of operation shall be added beginning in January of each year to insure compliance with BO.3.c of this section.
      - (d) The total daily fuel consumption rate of diesel, in gallons, for the corresponding date.
      - (e) The corresponding average hourly fuel consumption rate of diesel, in gallons per hour. The average hourly fuel consumption rate will be determined from the daily fuel consumption rate and the total daily hours of operation recorded in (b) and (d) above.
      - (f) Maintain on site and make available upon request, certification by the fuel supplier that the sulfur content of the diesel fuel delivered to the Permittee for use in **S2.056** complies with the sulfur limit in BO.3.b of this section.



## Facility ID No. A0001

#### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

#### **Section VI. Specific Operating Conditions (continued)**

**BO. Emission Unit S2.056 (continued)** 

- 4. NAC 445B.3405 (NAC 445B.316); NAC 445B.252 Part 70 Program continued
  - b. 40 CFR Part 60, Subpart IIII Notification, Reporting, and Recordkeeping Requirements (40 CFR 60.4214) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in Table 5 to 40 CFR Part 60, Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time (40 CFR 60.4214(b)).
- 5. 40 CFR Part 60, Subpart IIII Compliance Requirements for Owners and Operators (40 CFR 60.4211)
  - a. The Permittee must comply with the emission standards specified in 40 CFR Part 60, Subpart IIII. The Permittee must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer (40 CFR 60.4211(a)).
  - b. The Permittee must comply with the emission standards specified in 40 CFR 60.4205(b), as set forth in BO.2.j of this section. The Permittee must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4205(b), as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications (40 CFR 60.4211(c)).
  - c. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited (40 CFR 60.4211(f)).
- NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program Shielded Requirements</u>
   No Shielded Requirements

#### BUREAU OF AIR POLLUTION CONTROL

### Facility ID No. A0001

#### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

#### **Section VI. Specific Operating Conditions** (continued)

**BP. Emission Unit S2.057** Location North 4,449.10 km, East 531.85 km, UTM (Zone 11, NAD 83)

System 58 – Underground Emergency Diesel Generator

S 2.057 Underground Emergency Diesel Generator #4 (2,937 HP, mdl# CAT3516C, mfd 2012)

1. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Air Pollution Control Equipment

Emissions from \$2.057 shall have no add-on controls..

2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*; 40CFR60.4200 et. seq. Emission Limits

On and after the date of startup of **S2.057**, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **S2.057** the following pollutants in excess of the following specified limits:

- a. NAC 445B.2203 (<u>Federally Enforceable SIP Requirement</u>) The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.52** pound per million Btu.
- b. NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.97** pound per hour, nor more than **0.048** ton per year.
- c. NAC 445B.305  $\underline{Part\ 70\ Program}$  The discharge of  $PM_{10}$  (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.97** pound per hour, nor more than **0.048** ton per year.
- d. NAC 445B.305 <u>Part 70 Program</u> The discharge of SO<sub>2</sub> (sulfur dioxide) to the atmosphere will not exceed **0.029** pound per hour, nor more than **0.0015** ton per year.
- e. NAC 445B.305  $\underline{Part\ 70\ Program}$  The discharge of NO<sub>x</sub> (nitrogen oxides) to the atmosphere will not exceed **30.92** pounds per hour, nor more than **1.55** tons per year.
- f. NAC 445B.305 <u>Part 70 Program</u> The discharge of CO (carbon monoxide) to the atmosphere will not exceed **16.91** pounds per hour, nor more than **0.85** ton per year.
- g. NAC 445B.305 <u>Part 70 Program</u> The discharge of VOC (volatile organic compounds) to the atmosphere will not exceed **30.92** pounds per hour, nor more than **1.55** tons per year.
- h. NAC 445B.22047 (*Federally Enforceable SIP Requirement*) The maximum allowable discharge of sulfur to the atmosphere will not exceed **13.23** pounds per hour.
- i. NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from the exhaust stack of **S2.057** will not equal or exceed **20%** in accordance with NAC 445B.22017.
- j. New Source Performance Standards Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR Part 60.4200 et. seq.)
  - Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the following Tier 2 emission standards for new CI engines in 40 CFR Part 60 Subpart IIII (40 CFR Part 60.4205(b); 40 CFR Part 60.4202(a)(2); 40 CFR Part 89.112). For 2007 model year and later emergency stationary CI ICE with engine ratings greater than 560 kW:
  - (1) Particulate Matter (PM) shall not exceed 0.20 grams/kW-hr (0.15 g/hp-hr).
  - (2) Nonmethane Hydrocarbons plus Nitrogen Oxides (NMHC+NOx) shall not exceed 6.4 grams/kW-hr (4.8 g/hp-hr).
  - (3) Carbon Monoxide (CO) shall not exceed 3.5 grams/kW-hr (2.6 g/hp-hr).



### Facility ID No. A0001

#### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

### **Section VI. Specific Operating Conditions** (continued)

#### **BP. Emission Unit S2.057 (continued)**

- 3. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program;</u> 40CFR60.4200 et. seq.; 40CFR63.6590 Operating Parameters
  - a. S2.057 will combust diesel as the primary fuel and will not exceed 138 gallons of diesel combusted per hour.
  - b. The sulfur content of the diesel fuel combusted in S2.057 will not exceed 0.0015% by weight.
  - c. Hours
    - Maintenance checks and readiness testing of **S2.057** is limited to 100 hours per year. There is no time limit on the use of **S2.057** in emergency situations.
  - d. On or before the date of startup of **S2.057**, Permittee will install, calibrate, operate, and maintain a fuel flow meter to monitor the amount of diesel fuel combusted in **S2.057**.
  - e. New Source Performance Standards Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR Part 60.4200 et. seq.)
    - (1) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for non-road diesel fuel (40 CFR Part 60.4207):
      - (a) Sulfur content 15 ppm (0.0015 wt%) maximum for non-road diesel fuel.
      - (b) Cetane index or aromatic content minimum cetane index of 40 or maximum aromatic content of 35 volume percent.
    - (2) Permittee must install a non-resettable hour meter prior to startup of **S2.057** (40CFR60.4209(a)).
    - (3) Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR Part 60.4205(b), as set forth in BP.2.j of this section, according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine (40 CFR Part 60.4206).
  - f. 40 CFR Part 63.6590 Subpart ZZZZ, NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE)(40 CFR Part 63.6590 (c))
    - (1) An affected source that is a new or reconstructed stationary RICE located at an area source, must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines. No further requirements apply for such engines under this part.
- 4. NAC 445B.3405 (NAC 445B.316); NAC 445B.252 *Part 70 Program* 
  - a. Monitoring and Record keeping
    - The Permittee, upon issuance of this operating permit will:
    - (1) Monitor and record the diesel consumption rate for **S2.057** on a daily basis.
    - (2) Monitor and record the hours of operation for **S2.057** on a daily basis.
    - (3) Monitor the sulfur content of the diesel fuel combusted in **S2.057.**
    - (4) The required monitoring established in (1) through (3) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.057** is operating.
      - (a) The calendar date of any required monitoring.
      - (b) The total daily hours of operation for the corresponding date.
      - (c) The monthly hours of operation, and the corresponding hours of operation for the calendar year. The monthly hours of operation will be determined at the end of each calendar month as the daily hours of operation for each day of the calendar month. The monthly hours of operation shall be added beginning in January of each year to insure compliance with BP.3.c of this section.
      - (d) The total daily fuel consumption rate of diesel, in gallons, for the corresponding date.
      - (e) The corresponding average hourly fuel consumption rate of diesel, in gallons per hour. The average hourly fuel consumption rate will be determined from the daily fuel consumption rate and the total daily hours of operation recorded in (b) and (d) above.
      - (f) Maintain on site and make available upon request, certification by the fuel supplier that the sulfur content of the diesel fuel delivered to the Permittee for use in **S2.057** complies with the sulfur limit in BP.3.b of this section.



### Facility ID No. A0001

#### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

#### **Section VI. Specific Operating Conditions (continued)**

#### **BP. Emission Unit S2.057 (continued)**

- 4. NAC 445B.3405 (NAC 445B.316); NAC 445B.252 Part 70 Program continued
  - b. 40 CFR Part 60, Subpart IIII Notification, Reporting, and Recordkeeping Requirements (40 CFR 60.4214)
    If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in Table 5 to 40 CFR Part 60, Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time (40 CFR 60.4214(b)).
- 5. 40 CFR Part 60, Subpart IIII Compliance Requirements for Owners and Operators (40 CFR 60.4211)
  - a. The Permittee must comply with the emission standards specified in 40 CFR Part 60, Subpart IIII. The Permittee must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer (40 CFR 60.4211(a)).
  - b. The Permittee must comply with the emission standards specified in 40 CFR 60.4205(b), as set forth in BP.2.j of this section. The Permittee must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4205(b), as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications (40 CFR 60.4211(c)).
  - c. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited (40 CFR 60.4211(f)).
- NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program Shielded Requirements</u>
   No Shielded Requirements

#### BUREAU OF AIR POLLUTION CONTROL

### Facility ID No. A0001

#### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

#### **Section VI. Specific Operating Conditions (continued)**

**BQ. Emission Unit S2.058** Location North 4,449.89 km, East 532.22 km, UTM (Zone 11, NAD 83)

System 59 – Scale Building Emergency Diesel Generator

S 2.058 Scale Building Emergency Diesel Generator (168 HP, 125 kW, mdl# Iveco GHP/NEF N67, mfd 2012)

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from S2.058 shall have no add-on controls..

2. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u>; 40CFR60.4200 et. seq.

#### **Emission Limits**

On and after the date of startup of **S2.058**, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **S2.058** the following pollutants in excess of the following specified limits:

- a. NAC 445B.2203 (*Federally Enforceable SIP Requirement*) The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.60** pound per million Btu.
- b. NAC 445B.305 <u>Part 70 Program</u> The discharge of PM (particulate matter) to the atmosphere will not exceed **0.028** pound per hour, nor more than **0.0014** ton per year.
- c. NAC 445B.305 <u>Part 70 Program</u> The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.0014** pound per hour, nor more than **0.028** ton per year.
- d. NAC 445B.305 <u>Part 70 Program</u> The discharge of SO<sub>2</sub> (sulfur dioxide) to the atmosphere will not exceed **0.0021** pound per hour, nor more than **0.0001** ton per year.
- e. NAC 445B.305  $\underline{Part\ 70\ Program}$  The discharge of NO<sub>x</sub> (nitrogen oxides) to the atmosphere will not exceed **1.43** pounds per hour, nor more than **0.072** ton per year.
- f. NAC 445B.305 <u>Part 70 Program</u> The discharge of CO (carbon monoxide) to the atmosphere will not exceed **0.097** pound per hour, nor more than **0.0048** ton per year.
- g. NAC 445B.305 <u>Part 70 Program</u> The discharge of VOC (volatile organic compounds) to the atmosphere will not exceed **0.017** pound per hour, nor more than **0.0008** ton per year.
- h. NAC 445B.22047 (*Federally Enforceable SIP Requirement*) The maximum allowable discharge of sulfur to the atmosphere will not exceed **0.95** pound per hour.
- i. NAC 445B.22017 (*Federally Enforceable SIP Requirement*) The opacity from the exhaust stack of **S2.058** will not equal or exceed **20%** in accordance with NAC 445B.22017.
- j. New Source Performance Standards Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR Part 60.4200 et. seq.)
  - Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the following Tier 3 emission standards for new CI engines in 40 CFR Part 60 Subpart IIII (40 CFR Part 60.4205(b); 40 CFR Part 60.4202(a)(2); 40 CFR Part 89.112). For 2007 model year and later emergency stationary CI ICE with engine ratings between 75 kW and less than 130 kW:
  - (1) Particulate Matter (PM) shall not exceed 0.30 grams/kW-hr (0.22 g/hp-hr).
  - (2) Nonmethane Hydrocarbons plus Nitrogen Oxides (NMHC+NOx) shall not exceed 4.0 grams/kW-hr (3.0 g/hp-hr).
  - (3) Carbon Monoxide (CO) shall not exceed 5.0 grams/kW-hr (3.7 g/hp-hr).



### Facility ID No. A0001

#### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

### **Section VI. Specific Operating Conditions** (continued)

#### BQ. Emission Unit S2.058 (continued)

- 3. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program;</u> 40CFR60.4200 et. seq.; 40CFR63.6590 Operating Parameters
  - a. **S2.058** will combust diesel as the primary fuel and will not exceed **9.9** gallons of diesel combusted per hour.
  - b. The sulfur content of the diesel fuel combusted in S2.058 will not exceed 0.0015% by weight.
  - c. Hours
    - Maintenance checks and readiness testing of **S2.058** is limited to 100 hours per year. There is no time limit on the use of **S2.058** in emergency situations.
  - d. On or before the date of startup of **S2.058**, Permittee will install, calibrate, operate, and maintain a fuel flow meter to monitor the amount of diesel fuel combusted in **S2.058**.
  - e. New Source Performance Standards Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR Part 60.4200 et. seq.)
    - (1) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for non-road diesel fuel (40 CFR Part 60.4207):
      - (a) Sulfur content 15 ppm (0.0015 wt%) maximum for non-road diesel fuel.
      - (b) Cetane index or aromatic content minimum cetane index of 40 or maximum aromatic content of 35 volume percent.
    - (2) Permittee must install a non-resettable hour meter prior to startup of **S2.058** (40CFR60.4209(a)).
    - (3) Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR Part 60.4205(b), as set forth in BQ.2.j of this section, according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine (40 CFR Part 60.4206).
  - f. 40 CFR Part 63.6590 Subpart ZZZZ, NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE)(40 CFR Part 63.6590 (c))
    - (1) An affected source that is a new or reconstructed stationary RICE located at an area source, must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines. No further requirements apply for such engines under this part.
- 4. NAC 445B.3405 (NAC 445B.316); NAC 445B.252 Part 70 Program
  - a. Monitoring and Record keeping
    - The Permittee, upon issuance of this operating permit will:
    - (1) Monitor and record the diesel consumption rate for **S2.058** on a daily basis.
    - (2) Monitor and record the hours of operation for **S2.058** on a daily basis.
    - (3) Monitor the sulfur content of the diesel fuel combusted in **S2.058**.
    - (4) The required monitoring established in (1) through (3) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.058** is operating.
      - (a) The calendar date of any required monitoring.
      - (b) The total daily hours of operation for the corresponding date.
      - (c) The monthly hours of operation, and the corresponding hours of operation for the calendar year. The monthly hours of operation will be determined at the end of each calendar month as the daily hours of operation for each day of the calendar month. The monthly hours of operation shall be added beginning in January of each year to insure compliance with BQ.3.c of this section.
      - (d) The total daily fuel consumption rate of diesel, in gallons, for the corresponding date.
      - (e) The corresponding average hourly fuel consumption rate of diesel, in gallons per hour. The average hourly fuel consumption rate will be determined from the daily fuel consumption rate and the total daily hours of operation recorded in (b) and (d) above.
      - (f) Maintain on site and make available upon request, certification by the fuel supplier that the sulfur content of the diesel fuel delivered to the Permittee for use in **S2.058** complies with the sulfur limit in BQ.3.b of this section.



#### **BUREAU OF AIR POLLUTION CONTROL**

## Facility ID No. A0001

#### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

#### **Section VI. Specific Operating Conditions (continued)**

**BQ. Emission Unit S2.058 (continued)** 

- 4. NAC 445B.3405 (NAC 445B.316); NAC 445B.252 *Part 70 Program* continued
  - b. 40 CFR Part 60, Subpart IIII Notification, Reporting, and Recordkeeping Requirements (40 CFR 60.4214) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in Table 5 to 40 CFR Part 60, Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time (40 CFR 60.4214(b)).
- 5. 40 CFR Part 60, Subpart IIII Compliance Requirements for Owners and Operators (40 CFR 60.4211)
  - a. The Permittee must comply with the emission standards specified in 40 CFR Part 60, Subpart IIII. The Permittee must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer (40 CFR 60.4211(a)).
  - b. The Permittee must comply with the emission standards specified in 40 CFR 60.4205(b), as set forth in BQ.2.j of this section. The Permittee must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4205(b), as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications (40 CFR 60.4211(c)).
  - c. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited (40 CFR 60.4211(f)).
- NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program Shielded Requirements</u>
   No Shielded Requirements

\*\*\*\*\*\*\*\*\*\*\*\*End of Specific Operating Conditions\*\*\*\*\*\*\*\*

#### **BUREAU OF AIR POLLUTION CONTROL**

# Facility ID No. A0001 Permit No. AP1041-2141 CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

### **Section VII. Emission Caps**

A. No Emission Caps Defined

#### **BUREAU OF AIR POLLUTION CONTROL**

### Facility ID No. A0001

## Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

#### **Section VIII. Surface Area Disturbance Conditions**

Surface area disturbance in excess of 20 acres -6,139 acres for combined facilities

#### A. Dust Control Plan (NRS 445B.230.6)

The permittee may not cause or permit the construction, repair, or demolition work, or the use of unpaved or untreated areas without applying all such measures as may be required by the Director to prevent particulate matter from becoming airborne.

B. The permittee will control fugitive dust in accordance with the dust control plan entitled "Surface Area Disturbance Fugitive Dust Control Plan", as submitted on July 28, 2006

#### C. NAC 445B.22037

#### **Fugitive Dust**

- 1. The permittee may not cause or permit the handling, transporting, or storing of any material in a manner which allows or may allow controllable particulate matter to become airborne.
- 2. Except as otherwise provided in subsection 4, the permittee may not cause or permit the construction, repair, demolition, or use of unpaved or untreated areas without first putting into effect an ongoing program using the best practical methods to prevent particulate matter from becoming airborne. As used in this subsection, "best practical methods" includes, but is not limited to, paving, chemical stabilization, watering, phased construction, and revegetation.
- 3. Except as provided in subsection 4, the permittee may not disturb or cover 5 acres or more of land or its topsoil until the permittee has obtained an Permit to construct for surface area disturbance to clear, excavate, or level the land or to deposit any foreign material to fill or cover the land.
- 4. The provisions of subsections 2 and 3 do not apply to:
  - a. Agricultural activities occurring on agricultural land; or
  - b. Surface disturbances authorized by a permit issued pursuant to NRS 519A.180 which occur on land which is not less than 5 acres or more than 20 acres.

#### **BUREAU OF AIR POLLUTION CONTROL**

# Facility ID No. A0001 Permit No. AP1041-2141 CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

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### **Section IX. Schedules of Compliance**

**********End of Schedules of Compliance********



#### **BUREAU OF AIR POLLUTION CONTROL**

# Facility ID No. A0001

### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

#### Section X. Amendments

#### June 2, 2008

Administrative Amendment requested by the Permittee:

- 1. Permittee name changed to Barrick Cortez, Inc.
- 2. Mailing address changed to HC66 Box 1250, Crescent Valley, NV 89821-1250

#### November 5, 2008

1. Change of Location for System 18. Application Log # 09AP0132

#### March 11, 2009

- System 8 (Refinery Induction Furnaces, S2.002 S2.003) changes involve adding a carbon filter after the baghouse for mercury control; increasing hourly/annual PM/PM<sub>10</sub> emission limits from 0.24 lbs/hr and 0.18 tons/yr to 0.29 lbs/hr and 0.44 tons/yr; adding maximum allowable emission limits for PM<sub>10</sub>; increasing hourly/annual throughput limits from 0.05 tons/hr and 75 tons/yr to 0.125 tons/hr and 150 tons/yr; adding individual hourly throughput limits; increasing daily/annual operating hours from 20 hrs/day and 1500 hrs/yr to 24 hrs/day and 3000 hrs/yr; and adding a monitoring requirement for combined hourly throughputs.
- 2. System 10 (Carbon Kilns, S2.007 S2.008) changes involve adding a carbon filter after the wet scrubber for mercury control; increasing hourly/annual PM/PM<sub>10</sub> from 0.01 lbs/hr and 0.029 tons/yr to 0.013 lbs/hr and 0.056 tons/yr, and CO emission limits from 0.55 lbs/hr and 1.61 tons/yr to 0.71 lbs/hr and 3.10 tons/yr; adding maximum allowable emission limits for PM<sub>10</sub>; increasing hourly throughput limits from 0.63 tons/hr to 0.81 tons/yr; removing annual throughput limits; and increasing daily/annual operating hours from 16 hrs/day and 5840 hrs/yr to 24 hrs/day and 8760 hrs/yr.
- 3. System 12 (Lime Silo, S2.012 and PF1.028) changes involve a change to the description for PF1.028 from "pebble lime silo unloading to SAG mill" to "pebble lime silo unloading to enclosed screw conveyor" and adding maximum allowable emission limits for PM<sub>10</sub>.
- 4. System 13 (Assay Lab Sample Prep, S2.013a S2.013j) changes involve a reconfiguration of equipment; increasing annual PM/PM<sub>10</sub> emission limits from 8.12 tons/yr to 8.90 tons/yr; adding maximum allowable emission limits for PM<sub>10</sub>; increasing combined hourly throughput limits from 0.08 tons/hr to 0.21 tons/hr; increasing daily/annual operating hours from 22 hrs/day and 8030 hrs/yr to 24hrs/day and 8760 hrs/yr; adding a combined hourly throughput limit; and adding a monitoring requirement for combined hourly throughputs.
- 5. System 14 (Assay Lab Furnaces, S2.018a S2.018g) changes involve adding a new furnace (S2.018g); increasing annual PM/PM<sub>10</sub> emission limits from 7.66 tons/yr to 8.35 tons/yr; adding maximum allowable emission limits for PM<sub>10</sub>; increasing hourly combined throughput limits from 0.009 tons/hr to 0.022 tons/hr; adding individual hourly throughput limits; increasing daily/annual operating hours from 22 hrs/day and 8030 hrs/yr to 24 hrs/day and 8760 hrs/yr; and adding a monitoring requirement for individual hourly throughputs.
- 6. System 18/18A (A28 Heap Leach Lime Silo) changes involve revising UTM coordinates; combining System 18A into System 18; increasing emission limits for S2.019 from 0.012 lbs/hr and 0.002 tons/yr to 0.034 lbs/hr and 0.013 tons/yr for PM<sub>10</sub>, 0.035 lbs/hr and 0.006 tons/yr to 0.099 lbs/hr and 0.038 tons/yr for PM; decreasing emission limits for PF1.051 from 0.48 lbs/hr and 0.092 tons/yr to 0.036 lbs/hr and 0.046 tons/yr for PM10, 1.70 lbs/hr and 0.33 tons/yr to 0.077 lbs/hr and 0.098 tons/yr for PM; increasing emission limits for PF1.052 PF1.053 from 1.60 lbs/hr and 0.092 tons/yr to 0.12 lbs/hr and 0.046 tons/yr for PM<sub>10</sub>, 5.68 lbs/hr and 0.33 tons/yr to 0.26 lbs/hr and 0.098 tons/yr for PM; adding maximum allowable emission limits for PM<sub>10</sub>; increasing throughput limits for S2.019 from 30 tons/hr and 11,550 tons/yr to 100 tons/hr and 77,000 tons/yr; increasing annual throughputs for PF1.049 PF1.054 from 11,550 tons/yr to 77,000 tons/yr; and increasing annual operating hours for all emission units in System 18 from 578 hrs/yr to 8,760 hrs/yr.



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#### **BUREAU OF AIR POLLUTION CONTROL**

# Facility ID No. A0001 Permit No. AP1041-2141 CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

#### **Section X. Amendments** (continued)

#### March 11, 2009 (continued)

- 7. System 19/19A (A30 Heap Leach Lime Silo) changes involve revising UTM coordinates; combining System 19A into System 19; increasing emission limits for \$2.021 from 0.012 lbs/hr and 0.002 tons/yr to 0.034 lbs/hr and 0.013 tons/yr for \$PM\$<sub>10</sub>, 0.035 lbs/hr and 0.006 tons/yr to 0.099 lbs/hr and 0.038 tons/yr for \$PM\$; decreasing emission limits for \$P\$1.057 from 0.48 lbs/hr and 0.092 tons/yr to 0.036 lbs/hr and 0.046 tons/yr for \$PM\$10, 1.70 lbs/hr and 0.33 tons/yr to 0.077 lbs/hr and 0.098 tons/yr for \$PM\$; increasing emission limits for \$P\$1.058 \$P\$1.059 from 1.60 lbs/hr and 0.092 tons/yr to 0.12 lbs/hr and 0.046 tons/yr for \$PM\$<sub>10</sub>, 5.68 lbs/hr and 0.33 tons/yr to 0.26 lbs/hr and 0.098 tons/yr for \$PM\$; adding maximum allowable emission limits for \$PM\$<sub>10</sub>; increasing throughput limits for \$2.021 from 30 tons/hr and 11,550 tons/yr to 100 tons/hr and 77,000 tons/yr; increasing annual throughputs for \$P\$1.055 \$P\$1.060 from \$11,550\$ tons/yr to \$77,000 tons/yr; and increasing annual operating hours for all emission units in \$\$System 19 from \$578\$ hrs/yr to \$760 hrs/yr.
- 8. Addition of new concrete/shotcrete batch plants (Systems 41-45).
- 9. Addition of new metallic ore conveyance system (System 46).
- 10. Facility changes result in an increase of 7.23 tons/year PM, 4.38 tons/year PM<sub>10</sub>, and 1.50 tons/year CO.

#### December 11, 2009

System 35 reconfigured into Systems 35A/35B/35C. Remove "portable" from system description. Remove PF1.100/103 (consolidated into PF1.102). Remove PF1.101. Add conveyor 2 (System 35C, PF1.135). Add water spray controls for all emission units. Revise PM and PM $_{10}$  emission limits for existing emission units. Revise NSPS 40 CFR 60 Subpart OOO requirements. Add daily water spray inspections.

- System 36 reconfigured into Systems 36A/36B. Remove "portable" from system description. Remove PF1.104/106/107 (consolidated into PF1.105). Add secondary screen (System 36B, PF1.136). Add water spray controls for all emission units. Revise PM and PM<sub>10</sub> emission limits for existing emission units. Revise NSPS 40 CFR 60 Subpart OOO requirements. Add daily water spray inspections.
- System 37 reconfigured into Systems 37A/37B. Remove "portable" from system description. Remove PF1.108/110
  (consolidated into PF1.109). Add conveyor 5 (System 37B, PF1.137). Add water spray controls for all emission units. Revise
  PM and PM<sub>10</sub> emission limits for existing emission units. Revise NSPS 40 CFR 60 Subpart OOO requirements. Add daily
  water spray inspections.
- 3. System 38 reconfigured into Systems 38A/38B. Remove "portable" from system description. Change description for PF1.111. Add seven conveyors (System 38A, PF1.138 PF1.144). Add two conveyors (System 38B, PF1.145 PF1.146). Add water spray controls for all emission units. Revise PM and PM<sub>10</sub> emission limits for existing emission units. Revise NSPS 40 CFR 60 Subpart OOO requirements. Add daily water spray inspections.
- 4. System 41 reconfigured into Systems 41A/41B. Add 5.4 MMBtu/hr propane fired aggregate heater (System 41B, S2.046).
- 5. System 46 one additional conveyor (PF1.134) will be added.
- 6. System 47 is a new system and will add two 8.0 MMBtu/hr propane fired underground mine shaft heaters (S2.047 S2.048).
- 7. Add Method 9 opacity observations to new emission units in Section IIA of the operating permit.
- 8. Facility changes result in a net decrease of 7.89 tons/year PM, net decrease of 2.72 tons/year PM<sub>10</sub>, net increase of 9.32 tons/year NOx, net increase of 1.06 tons/year SO<sub>2</sub>, net increase of 5.38 tons/year CO, and net increase of 0.57 tons/year VOC.

#### March 11, 2010

1. Change of Location for System 19. Application Log # 10AP0238.

#### **BUREAU OF AIR POLLUTION CONTROL**

### Facility ID No. A0001

### Permit No. AP1041-2141

# CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

#### **Section X. Amendments** (continued)

#### September 20, 2010 - Application Log # 10AP0362

- System 8: Replace the hourly throughput rate with a batch weight for each furnace. Revise monitoring/recordkeeping in Section VI.J.4.a from hourly throughput rates to batch rates. Revise maximum allowable emission limit for PM<sub>10</sub>. No change to emission limits.
- System 10: Revise manufacturer name of S2.007 and S2.008 from Lockhead Haggerty to Lochhead Haggerty. Increase flow rate of
  exhaust stack from 600 dscfm to 1,200 dscfm, based on recent stack testing. Revise maximum allowable emission limit for PM<sub>10</sub>.
  No change to emission limits.
- 3. System 13: Add emission units S2.013k through S2.013p. Revise maximum allowable emission limit for PM<sub>10</sub>. No change to emission limits.
- 4. System 14: Revise manufacturer name of \$2.018a through \$2.018f from DFL, inc. to DFC Ceramics. Revise maximum allowable emission limit for PM10. No change to emission limits.
- 5. System 15: Replace PF1.028 with PF1.029 in Section VI.R.3.b.
- 6. System 31: Increase hourly throughput for emission units S2.028 through S2.033 from 1,000 tons/hr to 1,250 tons/hr. No change to emission limits. Add maximum allowable emission limit for  $PM_{10}$ .
- 7. System 32: Increase hourly throughput for emission units S2.034 through S2.038 from 1,000 tons/hr to 1,250 tons/hr. No change to emission limits. Add maximum allowable emission limit for PM<sub>10</sub>.
- 8. System 32A: Increase the hourly throughput for emission units S2.034A and PF1.093 from 1,000 tons/hr to 1,250 tons/hr. There are no changes to the emission limits for S2.034A. Increase PM and PM<sub>10</sub> emission limits for PF1.093. Add maximum allowable emission limit to S2.304A for PM<sub>10</sub>. Revise maximum allowable emission limit to PF1.093 for PM<sub>10</sub>.
- 9. System 46: Increase hourly and annual throughputs from 250 tons/hr and 750,000 tons/year to 450 tons/hr and 1,350,000 tons/year. Increase PM and PM<sub>10</sub> emission limits. Revise maximum allowable emission limit for PM<sub>10</sub>.
- 10. Remove emission units PF1.052 PF1.054, PF1.058 PF1.060, PF1.094 PF1.098, S2.039, S2.047, and S2.048 from Section II General Construction Requirements. Requirements have been satisfied.
- 11. Remove System 18A and System 19A from Section IIA Specific Construction Requirements. System 18A and 19A merged into Systems 18 and System 19 during permit revision in March 2009.
- 12. Facility changes result in a net increase of 2.52 tons/year PM and a net increase of 1.19 tons/year PM<sub>10</sub>.

#### <u>August 2, 2011 – Application Log # 11AP0115</u>

- 1. System 11: Remove three 4.8 MMBtu/hr Cleaver Brooks boilers (emission units \$2.009-\$2.011) and replace with two new 8.0 MMBtu/hr boilers.
- 2. Add System 48A and 48B, Cortez Hills Metal Sampling Plant.
- 3. Add System 49, Gasoline Storage Tanks.
- 4. Add IA1.139 Material Sampler to Non-Permitted Equipment List.
- 5. Revise visible emissions test language for all systems with weekly/monthly applicable requirements.
- 6. Facility changes result in a net increase of 4.51 tons/year PM, net increase of 0.79 tons/year PM<sub>10</sub>, net increase of 0.21 tons/year NOx, net increase of 1.06 tons/year SO<sub>2</sub>, net increase of 4.43 tons/year CO, and a net increase of 0.40 tons/year VOC.
- 7. Update Sections I-II-III-IV-V of the operating permit to reflect current regulations.

#### August 24, 2011

1. Change of Location for System 18. Change System 18 description from "Pipeline A28 Heap Leach Lime Silo" to "A28 Heap Leach Lime Silo". Application Log # 12AP0064.

# BUREAU OF AIR POLLUTION CONTROL

# Facility ID No. A0001 Permit No. AP1041-2141 CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: Barrick Cortez, Inc. as Permittee

#### **Section X. Amendments** (continued)

#### December 7, 2011

- 1. Minor Revision, Application Log # 12AP0039. Add Cortez Hills CHOP Aggregate Plant, Systems 50A/B/C/D.
- 2. Facility changes result in a net increase of 2.79 tons/year PM and a net increase of 1.07 tons/year PM<sub>10</sub>.

#### April 3, 2012

- 1. Minor Revision, Application Log # 12AP0275. Add Tails Dam Aggregate Plant, Systems 51 A/B/C/D/E/F/G/H.
- 2. Remove Systems 20 through 30, Systems 33 through 38, and Systems 43 through 45.
- 3. Remove Section IIA Specific Construction Requirements for Systems 31 and 32 (performance tests completed Oct/Nov 2010).
- 4. Fix material mistakes for System 32A. Decrease maximum allowable PM<sub>10</sub> emission limit for S2.034A and PF1.093 from 80.51 lbs/hr to 77.59 lbs/hr. Decrease PM<sub>10</sub> hourly emission limit from 1.23 lbs/hr to 0.98 lb/hr. Decrease PM hourly emission limit from 2.60 lbs/hr to 2.08 lbs/hr. The incorrect limits were based on a throughput rate of 1,250 tons/hr. The correct limits are based on the permitted throughput rate of 1,000 tons/hr.
- 5. Facility changes result in a net decrease of 22.4 tons/year PM and a net decrease of 8.6 tons/year PM<sub>10</sub>.

#### January 29, 2013

Change of Location for System 19. System 19 allowed at two locations (Cortez Hills and A30). Aircase #7302.

#### April 8, 2013 – Minor Revision, Aircase #6980

- 1. System 10 Revise PM/PM<sub>10</sub>/CO emission limits for Pipeline Carbon Kilns (\$2.007-\$2.008) based on recent performance testing.
- System 11 Change description of Pipeline Carbon Stripping Vessel Boilers to Vessel Heaters. Increase burner heat input from 8.0 MMBtu/hr to 12.6 MMBtu/hr for both heaters (S2.009-S2.010). Increase fuel usage rate from 87.5 gals/hr to 138 gals/hr. Increase emission limits. Add 40 CFR Part 60 Subpart Dc NSPS language.
- 3. System 12 Increase pebble lime unloading rate for PF1.028 from 1 ton/hr to 4 tons/hr.
- 4. System 31 Increase the dscfm of the baghouse from 37,397 to 40,000, increases PM/PM<sub>10</sub> emissions.
- 5. System 32A Increase throughput rates from 1,000 tons/hr to 1,250 tons/hr, increase hourly PM/PM<sub>10</sub> emissions.
- 6. System 47 Remove Cortez Hills Underground Mine Shaft Heaters (S2.047-48), treated as trivial activities (vent underground).
- 7. System 49 Rename System 49 as System 49A (S2.049, existing 12,000 gallon gasoline tank), System 49B (S2.050, existing 3,500 gallon gasoline tank), and System 49C (S2.056, new 12,000 gallon gasoline tank).
- 8. Systems 52-53-54 Add three new lime silos with lime conveyors (\$2.051-52-53, PF1.201-202-203-204-205-206).
- 9. System 55 Add new cement silo (S2.054, PF1.207).
- 10. Systems 56-57-58 Add three new 2,937 HP emergency diesel generators (S2.055-56-57).
- 11. System 59 Add new 168 HP emergency diesel generator (S2.058).
- 12. Remove General Construction Conditions in Section II for S2.009-S2.010-S2.018g-PF1.161-PF1.162-PF1.163-PF1.169-PF1.170-PF1.171-PF1.172-PF1.173-PF1.175-PF1.179-PF1.180.
- 13. Remove Specific Construction Requirements in Section IIA for System 8 (S2.002-003, testing completed July 2012), System 51A (PF1.161, testing completed June 2012), System 51B (PF1.162, testing completed June 2012), System 51C (PF1.163, testing completed June 2012), System 51E (PF1.169-170-171-172-173-174-175-179-180, testing completed June 2012).
- 14. Revise Method 9 test duration from 3 hours to 30 minutes in Section IIA for emission units PF1.151-PF1.153, PF1.155, PF1.157-PF1.159, PF1.164-PF1.168, PF1.176-PF1.178, PF1.181-PF1.191, and PF1.193-PF1.199 that are subject to 40 CFR Part 60 Subpart OOO. The test duration for process fugitive sources subject to Subpart OOO was revised in 2009.
- 15. Facility changes result in a net increase of 4.91 tons/yr PM, a net increase of 4.12 tons/year PM<sub>10</sub>, a net increase of 2.42 tons/yr for NOx, a net increase of 1.36 tons/yr for SO<sub>2</sub>, a net increase of 57.30 tons/yr for CO, and a net increase of 7.40 tons/yr for VOCs.

#### BUREAU OF AIR POLLUTION CONTROL

### Facility ID No. A0001 Permit No. AP1041-2141

### CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

**Issued to: Barrick Cortez, Inc. as Permittee** 

**Section X. Amendments** (continued)

#### This permit:

- Is non-transferable. (NAC 445B.287) Part 70 Program
- Will be posted conspicuously at or near the stationary source. (NAC 445B.318)(State Only **Requirement**)
- 3. Will expire and be subject to renewal five (5) years from January 28, 2008. (NAC 445B.315) Part 70 Program
- A complete application for renewal of an operating permit must be submitted to the director on the form provided by him with the appropriate fee at least 240 calendar days before the expiration date of this operating permit. (NAC 445B.323.2) Part 70 Program
- Any party aggrieved by the Department's decision to issue this permit may appeal to the State Environmental Commission (SEC) within ten days after the date of notice of the Department's action. (NRS 445B.340) (State Only Requirement)

THIS PERMIT EXPIRES ON:	January	28, 2013		
	Signature			
	Issued by:	Jeffrey Kinder, P.E. Supervisor, Permittir Bureau of Air Polluti	•	
	Phone:	(775) 687-9475	Date:	April 8, 2013

RP 01/08 03/09 12/09 08/11 12/11 04/12 01/13 04/13

#### **BUREAU OF AIR POLLUTION CONTROL**

#### CLASS I NON-PERMIT EQUIPMENT LIST

Appended to Barrick Cortez, Inc. Facility # A0001 Permit #AP1041-2141

Emission Unit #	Emission Unit Description
IA1.001	Pipeline Mill Standby Diesel Generator #1, rated at 2,200 HP
IA1.002	Pipeline Mill Standby Diesel Generator #2, rated at 2,200 HP
IA1.003	Pipeline Mill Standby Diesel Generator #3, rated at 2,200 HP
IA1.004-055	Pipeline Truck Shop - 52 Propane Space Heaters, each rated at 120,000 Btu/hr
IA1.056-057	Pipeline Truck Shop - 2 Propane Space Heaters, each rated at 115,000 Btu/hr
IA1.058-059	Pipeline Truck Shop - 2 Propane Space Heaters, each rated at 100,000 Btu/hr
IA1.060-062	Pipeline Truck Wash - 3 Propane Space Heaters, each rated at 120,000 Btu/hr
IA1.063	Pipeline Security - 300,000 Btu/hr Propane Space Heater
IA1.064-067	Pipeline Security - 4 Propane Space Heaters, each rated at 120,000 Btu/hr
IA1.068-069	Pipeline Security - 2 Propane Space Heaters, each rated at 115,000 Btu/hr
IA1.070	Pipeline Security - 40,000 Btu/hr Propane Space Heater
IA1.071-072	Pipeline Assay Lab - 2 Propane Space Heaters, each rated at 1,250,000 Btu/hr
IA1.073-074	Pipeline Assay Lab - 2 Propane Space Heaters, each rated at 300,000 Btu/hr
IA1.075	Pipeline Assay Lab - 115,000 Btu/hr Propane Space Heater
IA1.076-083	Pipeline Mill - 8 Propane Space Heaters, each rated at 400,000 Btu/hr
IA1.084-086	Pipeline CIC - 3 Propane Space Heaters, each rated at 135,000 Btu/hr
IA1.087	Pipeline Detox - 437,500 Btu/hr Propane Space Heater
IA1.088-093	Pipeline Detox - 6 Propane Space Heaters, each rated at 135,000 Btu/hr
IA1.094	Pipeline SABC - 400,000 Btu/hr Propane Space Heater
IA1.095	Pipeline Reactivation - 400,000 Btu/hr Propane Space Heater
IA1.096	Pipeline East Electrowinning Cell
IA1.097	Pipeline West Electrowinning Cell
IA1.098	Pipeline Sample Prep Truck Oven (Electric)
IA1.099	Pipeline Sample Prep Walk-In Oven (Electric)
IA1.100	Pipeline Assay Lab Drying Oven (Electric)
IA1.101-104	Pipeline Diesel Fuel Tanks - 4 at 10,000 gallons
IA1.105-106	Pipeline Diesel Fuel Tanks - 2 at 40,000 gallons
IA1.107-108	Pipeline Diesel Fuel Tanks - 2 at 18,000 gallons
IA1.109	Pipeline Diesel Fuel Tank - 1 at 27,000 gallons
IA1.111-114	Pipeline Ethylene Glycol Tank - 4 at 2,000 gallons
IA1.115	Cooling Tower for Wet Scrubber on Pipeline Carbon Reactivation Kilns (System 10)
IA1.116	256 kW (343.3 hp) Back-Up Diesel Generator for Cortez Groundwater Remediation System
IA1.117	256 kW (343.3 hp) Back-Up Diesel Generator for Cortez CIL Mill Operations
IA1.118	Cortez Hills Leach Pad Emergency Diesel Generator, rated at 2500 HP
IA1.119	Cortez Underground Emergency Diesel Genset #1, rated at 2500 HP
IA1.120	Cortez Underground Emergency Diesel Genset #2, rated at 2500 HP
IA1.121	Cortez Underground Emergency Diesel Genset #3, rated at 2500 HP
IA1.122	Cortez Mill Change House - 100,000 Btu/hr Propane Space Heater
IA1.123	Cortez Mill Safety Building - 66,000 Btu/hr Propane Space Heater
IA1.124	Cortez Mill Assay Lab - 1,200,000 Btu/hr Propane Space Heater
IA1.125	Cortez Mill Assay Lab - 800,000 Btu/hr Propane Space Heater
IA1.126	Cortez Mill Admin - 125,000 Btu/hr Propane Space Heater
IA1.127-131	Cortez Mill Shop - 5 Propane Space Heaters, each rated at 500,000 Btu/hr
IA1.132	Cortez Mill Shop - 125,000 Btu/hr Propane Space Heater
IA1.133	Cortez Mill Soil Vapor Extraction and Thermal/Catalytic Oxidizer Treatment Unit #1
IA1.134	Cortez Mill Diesel Fuel Tank - 1 at 10,000 gallons
IA1.135	Cortez Mill Diesel Fuel Tank - 1 at 500 gallons
IA1.136	Cortez Mill Diesel Fuel Tank - 1 at 6,000 gallons
IA1.138	Cortez Mill Wet Grind CIL and Carbon Columns (wet process, no emissions)
IA1.139	Material Sampler for Metallic Ore in System 48B (40 lbs/hr)

<u>Note</u>: The equipment listed on this attachment are subject to all applicable requirements of the NAC and ASIP.